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*400 scales for
instrumentalists,
vocalists, composers
and improvisers*

THE SCALE OMNIBUS

THIS EXCERPT INCLUDES A SUBSET OF ALL THE SCALES AND TABLES YOU CAN FIND IN "THE SCALE OMNIBUS". FOR THIS REASON, SOME HYPERLINKS ARE INACTIVE AND/OR GENERATE ERRORS WHEN CLICKED.

YOU CAN FIND THE FULL BOOK HERE

PDF FORMAT: <https://midi2themax.gumroad.com/l/scale-omnibus>

PAPERBACK AND KINDLE FORMATS:

<https://www.amazon.com/Scale-Omnibus-instrumentalists-vocalists-improvisers/dp/B0B45JJTMQ>

(also available on country-specific Amazon websites, e.g. www.amazon.co.uk, www.amazon.it, www.amazon.de, etc.)

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The Scale Omnibus has required countless days (and nights) of researching, typing, proofreading, and double-checking. I also wrote thousands of lines of code to find all the relationships between scales in an automatic and error-proof way.

I hope that instrumentalists, vocalists, composers, improvisers, students, and music hobbyists may find it useful and inspiring.

*I dedicate this book to my son Andrea,
wishing him to achieve whatever he wants from life
and have much fun while doing it.*

F.B.

Introduction

All kinds of music are based on scales. In primary school, we were taught to sing the major scale, and even people who don't play a musical instrument can usually distinguish between major and minor modes. If you are a classical, jazz, or pop musician, you probably learned a few more scales, most likely the modes of the [Major](#) scale, the [Blues](#) scale and the [Pentatonic](#) scale. In most cases, you don't need to learn any other scales; after all, for centuries, classical Western composers have produced wonderful masterpieces with no more than a couple dozen different scales.

Other musical traditions are based on a larger set of scales. If you play South Indian Carnatic music, you are expected to know and practice no fewer than seventy-two different ragas. If you are from North India, you should be able to distinguish between ragas based on the time of the day and the season of the year. Many ragas have different ascending and descending forms. Learning ragas is by no means a trivial undertaking.

Regardless of which musical style you are involved in, there is an unexplored world out there based on scales you might not be familiar with. Studying and practicing uncommon scales adds new sounds to your musical vocabulary and can inspire novel ideas for composition and improvisation.

The goal

The objective of ***The Scale Omnibus*** is to provide information about the many scales you can “borrow” from all over the world, from Western composers of the past to jazz and rock improvisers of the present. When possible, a scale description includes historical or geographical notes, oddities, and trivia. If you like knowing that the *Simpson* theme is based on the [Lydian Dominant](#) scale – which was also used by composers such as Debussy, Stravinsky, and Bartók – then this book is for you.

There are many books and websites containing tons of different scales. Many classical composers are familiar with Nicolas Slonimsky's *[Thesaurus of Scales and Melodic Patterns](#)*, and most jazz improvisers have studied Don Haerle's *[Scales for Jazz Improvisation](#)* or similar textbooks. These are must-read books and cover many scales in a very accurate manner; nevertheless, they leave out an even larger number of scales.

At the other side of the spectrum, you can easily find several websites with hundreds of scales, which are described in a very essential way (in most cases, just the interval list). For example, you should have a look at *The Piano Encyclopedia* (<http://pianoencyclopedia.com/scales>) or the *Huygens-Fokker* site (<http://www.huygens-fokker.org/docs/modename.html>), which also includes microtonal scales. Many [Wikipedia](#) pages are devoted to this topic – for example, search for “[List of musical scales and modes](#)” and “[Musical styles](#)” – and you can find many interesting historical and practical details.

The main shortcoming of the majority of these huge scale collections is that they fail to show the relationship between different scales. For example, none of them make it clear the the Egyptian scale, the Rui Bin Chinese scale, and the Madhyamavati Indian raga contain the same notes as the [Suspended Pentatonic](#) that is so widely used in jazz and rock, and that all of these scales are nothing but the second mode of the very popular [Major Pentatonic](#) scale. In that respect, remarkable exceptions are

Ian Ring's *The Amazing Scale Finder* (<http://ianring.com/musictheory/scales/finder.php>) and William Zeitler's website (<https://allthescales.org>): they both made a *gigantic* effort in classifying all the possible scales you can create with the 12 semitones and are probably the best source for music theory scholars. However, my goal in writing *The Scale Omnibus* was different, as I aimed at listing scales that have been *actually* used in all cultures and historical periods, so that it can be used as a source of inspirations for composers and improvisers alike.

The Scale Omnibus contains **1,054 scale names**, yet only **400 distinct scales**; thus, any given scale has about 2.5 synonyms on the average. Of those 400 distinct scales, as many as 245 scales are actually modes of another scale (e.g., the [Lydian Dominant](#) scale is mode IV of the [Melodic Minor](#) scale), which leaves just **155 scales that are truly different** – that is, they contain different sets of notes. Even if each mode of a given scale calls for a different treatment, you typically don't need to practice all the modes of a given scale, because the fingering on your instrument is the same for all of them. So the initial set of a thousand-plus scales is far more manageable than it might seem.

All the websites devoted to music scales include an example of the each scale starting on the C note or the interval list (e.g., CDEFGAB or – going by half-steps – 2212221 for the Major scale), or both. Transposing scales to other keys is often left as an exercise for the reader, as is determining which chords you can use the scale with. This book includes those pieces of information to minimize your effort.

Overview

To create some order in this vast material, the book has been organized into several sections.

The [Major and Minor Scales](#) chapter describes the [Major](#), the [Melodic Minor](#), the [Harmonic Minor](#) scales and the modes that can be derived from them.

The [Symmetrical Scales](#) section covers limited-transposition scales – that is, scales for which fewer than twelve distinct versions exist. For example, there are only two distinct [Whole-Tone](#) scales, one starting on C and the other starting on C# (the scales starting on D, E, F#, G#, and Bb are the same as the C scale).

The [Jazz Scales](#) chapter includes the many variations of the [Blues](#) and [Bebop](#) scales, whereas the [Pentatonic Scales](#) section offers an insight on the most common five-note scales used in jazz and world music. The [Modal Scales](#) section gathers variations of common modes of the major and minor scales and provides a lot of interesting hints for jazz improvisation.

The [European Scales](#), [Asian Scales](#), and [Indian Scales](#) sections group scales by their geographical origin. Indian scales typically belong to one of two groups: **melas** and **ragas**. The last chapter, [Miscellaneous Scales](#), includes African and American scales plus scales that don't fit nicely in any of the previous sections. Scales in these four chapters are listed alphabetically.

At the end of the book, you will find a few useful supplements. The [Scale Index](#) table summarizes the properties of all main scales described in more details in the various chapters. The [Scales by Name](#) table lists all scales in alphabetical order, including those that are synonyms for better-known scales. The [Scales by Interval](#) table provides a quick way to identify a scale from a group of notes or intervals.

Finally, the [Scales by Chord](#) table summarizes the scales that are typically used over different chords in jazz improvisation.

Some scales fit in more than one category, and the criteria for selecting the appropriate section were somewhat arbitrary. For example, some Indian five-note ragas were included in the [Pentatonic Scales](#) section, while others are listed in the [Indian Scales](#) section. This was done in an attempt to keep different modes of a given pentatonic scale in adjacent pages.

Selection criteria

While a great effort has been done to include as many distinct scales as possible, *The Scale Omnibus* doesn't cover all the scales that have been used over the years by musicians from all over the world. In fact, only scales meeting a few requirements are listed in this collection.

First, **only scales with five or more notes are included**. The rationale here is that scales with four or fewer notes – there are “scales” with just two notes! – may be of interest to a musicologist but are inadequate for modern compositions and improvisations.

Second, **only scales whose contiguous notes form an interval smaller than a perfect 5th** (i.e. six semitones or fewer) are included. The idea here is that scales with very large intervals between adjacent steps are of little interest for composers and improvisers.

Third, **only scales based on the twelve-tone equal temperament are included**. Microtonal scales, scales that use just temperament, and scales that use equal temperament obtained by dividing the octave in a number of intervals other than twelve – as is the case of some Arabian scales – are either not included or are approximated to the nearest twelve-tone equal temperament scale, as explained in next section. For more information, search Wikipedia for “[Equal Temperament](#).”

Fourth, in most cases **only the ascending mode of a scale is included**. There are several scales that use a different set of notes in their ascending and descending version; however, this book only lists the ascending version. There are some exceptions, though, such as the [Enigmatic](#) scale and a few Indian ragas.

Modes, intervals, chords

At the top of each page, you will find a list of the notes that make up that page's scale in the key of C, followed by a list of alternate names and synonyms for that scale (if they exist) and a list of modes that can be generated from that scale (or the name the primary scale if the current scale is itself a mode of another scale). In many cases, the alternate name section mentions the scale number used in Nicolas Slonimsky's *Thesaurus of Scales and Melodic Patterns*, perhaps the most authoritative reference textbook about musical scales.

The selection of a given scale as the primary scale that generates one or more modes was sometimes arbitrary. For instance, while the relationship between modes of major and minor scales is clearly established – everyone agrees that the [Dorian](#) mode is the second mode of the [Major](#) scale and not the other way around – stating that the [Raga Hamsanandi](#) is the fourth mode of the [Blues](#) scale doesn't imply a similar stylistic or historical relationship. It is simply a helpful way of thinking; it tells you that if

you are proficient with the Blues scale on your instrument, then you also have the Raga Hamsanandi scale under your fingers, and it's just a matter of experimenting with how that scale sounds over selected harmonies.

Each scale is uniquely identified by its list of intervals in semitones. For example, the intervals for the Major scale are “2 2 1 2 2 2 1,” indicating two half-steps, two half-steps, one half-step, etc. I prefer this numeric notation over other popular systems – such as using an H for half-steps and a W for whole steps – because it is more intuitive for showing wider intervals.

As mentioned above, the book includes many non-Western scales – for example, Chinese and Indonesian scales – that use tuning system other than the division of the octave in 12 equal parts. In such cases, the intervals of these scales have been “rounded” to the nearest Western semitone. After this “rounding”, the scale often coincides with a more popular Western scale and is listed under the “Alternate names” section.

If a scale has a corresponding mirror scale, such mirror scale is mentioned next to the interval list. A **mirror scale** is the scale that is formed using the same intervals as the main scale, but in inverted order. For example, if you reverse the order of the intervals of the [Major](#) scale you get “1 2 2 2 1 2 2”, which are the intervals you find in the [Phrygian](#) mode, therefore the Phrygian mode is the mirror scale of the Major scale. Another way to build a mirror scale is to apply the intervals in the original order but consider them as *descending* intervals: if you start from the C note and go down using the “2 2 1 2 2 2 1” sequence, you get the C, B \flat , A \flat , G, F, E \flat , D \flat notes, which are the notes in C Phrygian. Rather than being just a curiosity, mirror scales can have a role in harmonization, as explained in this video:

<https://youtu.be/Eu76BV0kzDE>. If we limit our analysis to scales that are popular enough to deserve a name, there are **230 scales that have a mirror equivalent** – or there are 115 pairs of mirror scales, if you prefer - plus **20 scales that mirror on themselves**, also known as **palindromic** scales (e.g. the [Dorian](#) mode or [Whole-Tone](#) scale, and of course the [Chromatic](#) scale). Many mirror scale are named after the main scale plus the “Inverse” word, e.g. [Harmonic Minor Inverse](#) or [Gypsy Inverse](#).

Given that we only have 12 notes to play with, any given scale has several “sibling” scales that differ only for one note, and you can go from one scale to its sibling by removing or changing an existing note, or adding a note that doesn't exist already. For example, the [Minor Pentatonic](#) and the [Blues](#) scales have the same notes, except the latter contains the augmented 4th, which is missing the in the former.

In absence of more established terms, the words **subset scale** and **superset scale** have been (arbitrarily) used for such relationships: in previous example, the Blues scale is annotated as a superset of (that is, *it contains*) the Minor Pentatonic scale, which in turn is a subset scale of (*it is contained in*) the Minor Pentatonic. Another way to explain the relationship is that you can *drop* the IV degree of the Blues to obtain the Minor Pentatonic, and you can go in the opposite direction by *adding* the flat 5th degree to the Minor Pentatonic scale. This information helps you both in practicing on your instrument and in searching for scales that sound similar to those you already are familiar with.

Another way to create a “sibling” scale is by raising or lowering one of its note by a semitone. For example, you can go from the [Major](#) scale to the [Lydian](#) scale by raising the 4th degree of the former; likewise, you can go in the opposite direction by lowering the 4th degree of the latter. Again, there is no established term for this kind of relationship and this book arbitrarily uses the word **similar scales**.

For each scale, one or more chords are provided. These are the chords for which the scale can work well for improvisation. Keep in mind, though, that some scales – especially Indian ragas and scales with nine or more notes – don't easily adapt to Western harmony; their potential dissonances requires either careful handling or a special context in order to succeed. In some cases, the accompanying text specifies which notes should be avoided or used as passing notes, but most of the time, such advice has been omitted.

Scales are shown in all twelve keys, with the exception of the [Chromatic](#) scale for obvious reasons. Effort has been made to select accidentals that preserve the nature of each scale, yet also to minimize the number of accidentals and to avoid double sharps and double flats if possible. Seven-note scales typically are listed with seven distinct note names, each with the proper accidental. For non-Western scales and for scales with eight or more notes, accidentals are used more liberally.

A great advantage of an e-book over a standard paper book is that the former can include hyperlinks, both to websites and to other portions of the same document. This feature has been used extensively in the PDF version of ***The Scale Omnibus***. Virtually every scale name is a hyperlink to a page where the scale is described in detail. For example, you can quickly get more information about all the modes of a given primary scale. Hyperlinks are heavily used in the four appendices, where you can explore all scales by their name, interval set, children modes, related chords, and so forth. To get an idea of how complete and intricate this cross-reference net is, consider that the PDF contains *over five thousand hyperlinks!*

The Scale Playground app

The **Scale Playground** is a desktop software application – for Mac and Windows systems – that allows you to hear how each scale sounds like, both by itself and over chords, and even practice together with it. Plus, if you have a MIDI keyboard, you can connect it to your computer and have the application ensure that all the notes you play fit nicely in the current scale.

Read more in [Appendix F](#) or download it at <https://gumroad.com/midi2themax>.

The Scale Library for Ableton Live

The **Scale Library** is a collection of ready-to-use presets for Ableton Live's Scale device, that allows you to use any of the scales described in this book inside a Live project.

Read more in [Appendix G](#) or download it at <https://gumroad.com/midi2themax>.

Praises for “The Scale Omnibus”

The first edition of this book has been welcomed by several music teachers and performers. Here are some of their comments.

THE SCALES OMNIBUS is a precious resource for all musicians, over 400 pages devoted to musical scales from all latitudes, from the very popular to the most mysterious ones. I often find myself consulting this useful textbook together with my Conservatory students, whenever we have a doubt or look for inspiration. The many hyperlinks prove to be very useful and enrich the book, which has become a real, even-expanding enciclopedia. Thank you, Francesco.

Teo Ciavarella, pianist and teacher at G.B.Martini Conservatory (Bologna, Italy) – played with and/or recorded over 30 albums with George Garzone, Paolo Fresu, Hiram Bullock, Gerry Mulligan, Eddie Gomez, Henghel Gualdi, Lucio Dalla or his own trio.

THE SCALES OMNIBUS is an unbelievable collection of all known scales and related sound possibilities. Every scale is a journey in a “world” that sounds different and opens up countless opportunities for improvisers, composers, and performers of any music genre. This book is a stimulus for your creativity, by unveiling new musical landscapes, in a simple way. For a jazz player it is the quick and exhaustive answer to many questions. A complete research work that required a huge devotion, it’s shimmering gold.

Gaetano Partipilo, alto and soprano sax player, teacher at Siena Jazz University – played and/or recorded with Nguyễn Lê, DeeDee Bridgewater, Robin Eubanks, Mike Moreno, David Binney, Gianluca Petrella, Fabrizio Bosso, Stefano Bollani, Nicola Conte in all five continents.

I believe that THE SCALES OMNIBUS is the most interesting book about scales I have ever read. Over the years I had a look at many books on this topic, yet this omnibus is by far the most complete one and the one that goes deeper. In fact, I decided to go back to studying scales and their combinations with a fresh new approach, and used this book as a motivation for new roads in improvisation and, above all, composition.

Javier Giroto, soprano and bari sax player and music educator – leader of Aires Tango, played with Danilo Perez, George Garzone, Bob Moses, Orchestre National du Jazz (Paris), Enrico Rava, Stefano Bollani, Paolo Fresu and many others.

Inspired by this book, Javier composed “Messiango” for sax solo, based on the [Messiaen](#) scale and all its modes. Being the nice person that he is, he kindly agreed to share this composition with my readers. Find it in [Appendix E](#) or hear it here: <https://youtu.be/SnEbEJ6AxJc>.

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Major and Minor Scales

Major



Alternate names: Ionian mode, Peruvian Major, Ghana Heptatonic, Ararai (Ethiopia), Xin (China), Maqam Cargah, Ajam Ashiran, Dastgah-e Mahur, Dastgah-e Rast Panjgah, Raga Bilaval That, Raga Arabhi descending, Raga Bilahari descending, Mela Shankarabharanam – scale 1045 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Modes: Dorian (II), Phrygian (III), Lydian (IV), Mixolydian (V), Aeolian (VI), Locrian (VII)

Intervals: 2 2 1 2 2 2 1 – mirror scale of the Phrygian mode

Similar scales: Gypsy Inverse (lower degree II), Houzam (raise II), Melodic Minor (lower III), Lydian (raise IV), Ionian $\flat 5$ (lower V), Ionian Augmented (raise V), Harmonic Major (lower VI), Mela Naganandini (raise VI), Mixolydian (lower VII)

Subset scales: Raga Hari Nata (drop II), Raga Nagagandhari (III), Lydian Hexatonic (IV), Scottish Hexatonic (VII)

Superset scales: Ichikotsucho (add $\flat 5$), Bebop Major ($\flat 6$), Bebop ($\flat 7$)

Chords: C, Cmaj7, C6

The major scale is the fundamental scale in all Western music and its modes are used in virtually all jazz styles. In general, the 4th degree should be used as a passing tone and resolve to the major 3rd.

Individual notes of the major scale are sometimes called with specific names: tonic (root), supertonic (2nd), mediant (3rd), subdominant (4th), dominant (5th), submediant (6th), leading tone (7th).



Dorian



Alternate names: Gregorian 8, Mischung 5 (Germany), Yu (China), Hyojo (Japan), Oshikicho (Japan), Nam (Vietnam), Raga Kafi That, Mela Kharaharapriya, Raga Bhairavi ascending, Raga Kharapriya, Raga Shree descending, Raga Bhimpalasi, Raga Nayaki Kanada, Raga Sri, Raga Ritigaula, Raga Huseni, Raga Kanara, Raga Bageshri – scale 1041 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode II of [Major](#) scale (C Dorian = B \flat Major)

Intervals: 2 1 2 2 2 1 2 – mirror scale of itself

Similar scales: [Dorian \$\flat 2\$](#) (lower degree II), [Mixolydian](#) (raise III), [Bebop Minor](#) (lower IV), [Romanian Minor](#) (raise IV), [Blues Heptatonic](#) (lower V), [Aeolian](#) (lower VI), [Melodic Minor](#) (raise VII)

Subset scales: [Raga Manohari](#) (drop II), [Mixolydian Hexatonic](#) (III), [Raga Manavi](#) (IV), [Raga Shreeranjani](#) (V), [Minor Hexatonic](#) (VI), [Sho](#) (VII)

Superset scales: [Adonai Malakh](#) (add $\flat 2$), [Bebop Dorian](#) (3), [Blues Octatonic](#) ($\flat 5$), [Dorian Aeolian](#) ($\flat 6$), [Raga Mian Ki Malhar](#) (7)

Chords: Cm7, Cm7/9

In jazz improvisation, the Dorian scale is the primary choice over minor chords when they are used as IIm7 chords (e.g. Dm7 in C major key).



Phrygian



Alternate names: Major Inverse, Ousak (Greece), Zokuso (Japan), Maqam Kurd (Iraq), Selisir (Indonesia), Raga Dhanyasi descending, Mela Hanumatodi, Mela Bhairavi That, Raga Bilashkhani Todi, Raga Ghanta – scale 1036 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode III of [Major](#) scale (C Phrygian = A \flat Major)

Intervals: 1 2 2 2 1 2 2 – mirror scale of the [Major](#) scale

Similar scales: [Aeolian](#) (raise degree II), [Mela Ratnangi](#) (lower III), [Phrygian Dominant](#) (raise III), [Phrygian \$\natural\$](#) (lower IV), [Mela Bhavapriya](#) (raise IV), [Locrian](#) (lower V), [Dorian \$\flat\$](#) (raise VI), [Raga Malini](#) (lower VII), [Neapolitan Minor](#) (raise VII)

Subset scales: [Phrygian Hexatonic](#) (drop II), [Insen](#) (III), [Raga Kashyapi](#) (IV), [Ritzu](#) (V), [Raga Gandharavam](#) (VI), [Raga Suddha Simantini](#) (VII)

Superset scales: [Phrygian Aeolian \$\natural\$](#) (add 2), [Flamenco](#) (3), [Bebop Locrian](#) (\flat 5), [Hamel](#) (7)

Chords: Cm7

In jazz improvisation, the Phrygian scale is the primary choice over minor chords when they are used as IIIIm7 chords (e.g. Em7 in C major key).



Lydian



Alternate names: Ping (China), Gu (China), Mela Mecakalyani, Raga Shuddh Kalyan, Raga Kalyan That – scale 1047 of Slonimsky’s *Thesaurus of Scales and Melodic Patterns*

Mode: mode IV of [Major](#) scale (C Lydian = G Major)

Intervals: 2 2 2 1 2 2 1 – mirror scale of the [Locrian](#) mode

Similar scales: [Raga Marwa Thaata](#) (lower degree II), [Lydian #2](#) (raise II), [Lydian Diminished](#) (lower III), [Major](#) (lower IV), [Lydian Augmented](#) (raise V), [Pelog](#) (lower VI), [Lydian #6](#) (raise VI), [Lydian Dominant](#) (lower VII)

Subset scales: [Raga Nishadi](#) (drop III), [Lydian Hexatonic](#) (IV), [Raga Mruganandana](#) (V), [Raga Ratnakanthi](#) (VI), [Raga Airavati](#) (VII)

Superset scales: [Ichikotsucho](#) (add 4)

Chords: C, Cmaj7, C#11

In modern jazz, the Lydian scale is often preferred to the [Major](#) scale over major chords because its 4th degree doesn’t need to resolve down to the 3rd. This scale became very popular in modern jazz also thanks to George Russell’s *Lydian Chromatic Concepts* textbook.



Mixolydian



Alternate names: Gregorian 2, Mischung 3 (Germany), Shang (China), Mela Harikamboji, Raga Kambodhi descending, Raga Khamaj That, Raga Janjhuti, Raga Harini, Raga Khambhavati, Raga Surati, Raga Balahamsa – scale 1044 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode V of [Major](#) scale (C Mixolydian = F Major)

Intervals: 2 2 1 2 2 1 2 – mirror scale of the [Aeolian](#) mode

Similar scales: [Harmonic Minor Inverse](#) (lower degree II), [Rock 'n Roll](#) (raise II), [Dorian](#) (lower III), [Lydian Dominant](#) (raise IV), [Mixolydian b5](#) (lower V), [Mixolydian Augmented](#) (raise V), [Melodic Major](#) (lower VI), [Major](#) (raise VII)

Subset scales: [Raga Vegavahini](#) (drop II), [Mixolydian Hexatonic](#) (III), [Mixolydian Hexatonic 2](#) (IV), [Raga Nattaikurinji](#) (V), [Raga Siva Kambhoji](#) (VI), [Scottish Hexatonic](#) (VII)

Superset scales: [Bebop Dorian](#) (add b3), [Bebop](#) (7)

Chords: C7, C9

In most jazz styles, the Mixolydian scale is the primary choice over dominant 7th chords with no altered note.



Aeolian



Alternate names: Natural Minor, Peruvian Minor, Cushak (Armenia), Ezel (Ethiopia), Geez (Ethiopia), Se (Japan), Raga Bhairavi descending, Mela Natabhairavi, Raga Jaunpuri, Raga Adana, Raga Jingla, Raga Asavari That – scale 1040 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode VI of [Major](#) scale (C Aeolian = Eb Major)

Intervals: 2 1 2 2 1 2 2 – mirror scale of the [Mixolydian](#) mode

Similar scales: [Phrygian](#) (lower degree II), [Melodic Major](#) (raise III), [Sabach](#) (lower IV), [Gypsy](#) (raise IV), [Half Diminished](#) (lower V), [Dorian](#) (raise VI), [Mela Jhankaradhvani](#) (lower VII), [Harmonic Minor](#) (raise VII)

Subset scales: [Phrygian Hexatonic](#) (drop II), [Raga Navamanohari](#) (III), [Raga Trimurti](#) (IV), [Minor Hexatonic](#) (VI)

Superset scales: [Phrygian Aeolian](#) ♭4 (add ♭2), [Dorian Aeolian](#) (6), [Bebop Harmonic Minor](#) (7)

Chords: Cm7

In jazz improvisation, the Aeolian scale is the primary choice over minor chords when they are used as VIm7 chords (e.g. Am7 in C major key).



Locrian



Alternate names: Pien Chih (China), Makam Lami (Jewish), Yishtabach (Jewish) – scale 1035 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode VII of [Major](#) scale (C Locrian = $D\flat$ Major)

Intervals: 1 2 2 1 2 2 2 – mirror scale of the [Lydian](#) mode

Similar scales: [Half Diminished](#) (raise degree II), [Locrian Dominant](#) (raise III), [Altered Dominant](#) (lower IV), [Phrygian](#) (raise V), [Blues Phrygian](#) (lower VI), [Locrian 6](#) (raise VI), [Locrian \$\flat 7\$](#) (lower VII), [Locrian Maj7](#) (raise VII)

Subset scales: [Raga Gurjari Todi](#) (drop IV), [Ritzu](#) (V), [Honkoshi](#) (VI)

Superset scales: [Spanish Octatonic](#) (add 3), [Bebop Locrian](#) (5), [Prokofiev](#) (7)

Chords: $Cm7/\flat 5$

In jazz improvisation, the Locrian scale is the primary choice over half-diminished chords when they are used as $VIm7$ chords (e.g. $Bm7/\flat 5$ in C major key).



Melodic Minor



Alternate names: Ascending Minor, Mischung 1 (Germany), Mela Gaurimanohari, Raga Patdip, Raga Velavali, Raga Deshi 2 – scale 1042 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Modes: [Dorian b2](#) (II), [Lydian Augmented](#) (III), [Lydian Dominant](#) (IV), [Melodic Major](#) (V), [Half-diminished](#) (VI), [Altered Dominant](#) (VII)

Intervals: 2 1 2 2 2 2 1 – mirror scale of the [Dorian b2](#) mode

Similar scales: [Neapolitan Major](#) (lower degree II), [Major](#) (raise III), [Lydian Diminished](#) (raise IV), [Jeths](#) (lower V), [Jazz Minor #5](#) (raise V), [Harmonic Minor](#) (lower VI), [Mela Varunapriya](#) (raise VI), [Dorian](#) (lower VII)

Subset scales: [Raga Nagagandhari](#) (drop III), [Hawaiian](#) (IV), [Raga Sindhura Kafi](#) (VI), [Sho](#) (VII)

Superset scales: [Bebop Melodic Minor](#) (add b6), [Raga Mian Ki Malhar](#) (b7)

Chords: Cmin/maj7, Cmin6

In classical music, this scale has two versions: ascending and descending; the descending version has both 6th and 7th degrees flattened (i.e. A^b and B^b for the C minor melodic scale), which makes it identical to the descending form of the Aeolian mode. In jazz music, no such distinction exists.



Dorian $\flat 2$



Alternate names: Jazz Minor Inverse, Phrygian Natural 6, Phrygian Mixolydian, Javanese, Mela Natakapriya, Raga Natabharanam, Raga Ahiri Todi – scale 1037 in Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode II of [Melodic Minor](#) scale (C Dorian $\flat 2$ = B \flat Melodic Minor)

Intervals: 1 2 2 2 1 2 – mirror scale of the [Melodic Minor](#) scale

Similar scales: [Dorian](#) (raise degree II), [Mela Venaspati](#) (lower III), [Harmonic Minor Inverse](#) (raise III), [Dorian \$\flat 2\$ \$\flat 4\$](#) (lower IV), [Dorian \$\flat 9\$ #11](#) (raise IV), [Locrian #6](#) (lower V), [Phrygian](#) (lower VI), [Neapolitan Major](#) (raise VII)

Subset scales: [Raga Manohari](#) (drop II), [Raga Rasavali](#) (III), [Raga Salagavarali](#) (IV), [Raga Gandharavam](#) (VI)

Superset scales: [Adonai Malakh](#) (add 2), [LG Octatonic](#) (3)

Chords: Cm7/ $\flat 9$, C7sus/ $\flat 9$



Lydian Augmented



Alternate names: Lydian #5, Altered Lydian – scale 1048 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode III of [Melodic Minor](#) scale (C Lydian Augmented = A Melodic Minor)

Intervals: 2 2 2 2 1 2 1 – mirror scale of the [Altered Dominant](#) scale

Similar scales: [Aeolian b1](#) (raise degree II), [Nohkan](#) (raise III), [Ionian Augmented](#) (lower IV), [Lydian](#) (lower V), [Leading Whole-Tone](#) (raise VI), [Lydian Augmented Dominant](#) (lower VII)

Subset scales: [Raga Mruganandana](#) (drop V), [Eskimo Hexatonic 2](#) (VI), [Eskimo Hexatonic](#) (VII)

Chords: Cmaj7/b5, Cmaj7/b5

The Lydian Augmented scale has been used by many bop and post-bop players, such as McCoy Tyner.



Lydian Dominant



Alternate names: Lydian $\flat 7$, Harmonic Lydian, Mixolydian $\sharp 4$, Bartok, Acoustic, Overtone, Mela Vacaspati, Raga Bhusavati or Bhusavali – scale 1046 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode IV of [Melodic Minor](#) scale (C Lydian $\flat 7$ = G Melodic Minor)

Intervals: 2 2 2 1 2 1 2 – mirror scale of the [Half Diminished](#) scale

Similar scales: [Romanian Major](#) (lower degree II), [Hungarian Major](#) (raise II), [Romanian Minor](#) (lower III), [Mixolydian](#) (lower IV), [Lydian Augmented Dominant](#) (raise V), [Lydian Dominant \$\flat 6\$](#) (lower VI), [Lydian](#) (raise VII)

Subset scales: [Raga Vutari](#) (drop II), [Raga Sarasvati](#) (III), [Mixolydian Hexatonic 2](#) (IV), [Prometheus](#) (V), [Raga Airavati](#) (VII)

Chords: C7/ $\flat 5$, C7/ $\sharp 11$

The Lydian Dominant scale differs from the Mixolydian scale for its raised 4th degree, therefore it is often preferred to [Mixolydian](#) scale as the primary choice for altered dominant chords, especially when not resolving to the tonic chord (e.g. C7/ $\sharp 11$ when not resolving to Fmaj7 or Fm7).

In classical music, this scale is sometimes referred to as Acoustic scale and has been used by 19th- and 20th-century composers such as Liszt, Debussy, Stravinsky, Bartók, Szymanowski, and Howard Hanson (*Symphony n. 4*). This scale is also used in folk music of Polish Highlands and Nordeste (northeastern region of Brazil).

A bit of trivia: the Lydian Dominant scale is used in the *Simpson Theme* song.



Melodic Major



Alternate names: Mixolydian $\flat 6$, Mixolydian $\flat 13$, Aeolian Major, Major Minor, Mischung 6 (Germany), Hindu (India), Maqam Ussak (Iraq), Mela Carukesi, Raga Tarangini – scale 1043 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode V of [Melodic Minor](#) scale (C Melodic Major = F Melodic Minor)

Intervals: 2 2 1 2 1 2 2 – mirror scale of itself

Similar scales: [Phrygian Dominant](#) (lower degree II), [Mela Ragavardhani](#) (raise II), [Aeolian](#) (lower III), [Lydian Dominant](#) $\flat 6$ (raise IV), [Major Locrian](#) (lower V), [Mixolydian](#) (raise VI), [Bebop Major Heptatonic](#) (lower VII), [Harmonic Major](#) (raise VII)

Subset scales: [Raga Kamalamanohari 2](#) (drop II), [Raga Navamanohari](#) (III), [Raga Siva Kambhoji](#) (VI)

Chords: C7/#5, C7/ $\flat 13$



Half Diminished



Alternate names: Semilocrian, Locrian Natural 2, Minor Locrian, Minor $\flat 5$, Altered Diminished – scale 1039 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode VI of [Melodic Minor](#) scale (C Half Diminished = $E\flat$ Melodic Minor)

Intervals: 2 1 2 1 2 2 – mirror scale of the [Lydian Dominant](#) scale

Similar scales: [Locrian](#) (lower degree II), [Major Locrian](#) (raise III), [Semilocrian \$\flat 4\$](#) (lower IV), [Aeolian](#) (raise V), [Blues Modified](#) (lower VI), [Blues Heptatonic](#) (raise VI), [Hungarian Major Inverse](#) (lower VII), [Harmonic Minor \$\flat 5\$](#) (raise VII)

Subset scales: [Takemitsu Tree 2](#) (drop IV)

Chords: $Cm7/\flat 5$

The Half Diminished scale is similar to the Locrian scale, except it contains a major 9th instead of minor 9th. It is often preferred to the [Locrian](#) scale when improvising over half-diminished chords, when they work as II degree of minor key (e.g. $Dm7/\flat 5$ in C minor key).



Altered Dominant



Alternate names: Altered, Superlocrian, Locrian $\sharp 4$, Pomeroy, Ravel – scale 1034 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode VII of [Melodic Minor](#) scale (C Altered Dominant = D \flat Melodic Minor)

Intervals: 1 2 1 2 2 2 2 – mirror scale of the [Lydian Augmented](#) scale

Similar scales: [Semilocrian \$\sharp 4\$](#) (raise degree II), [Superlocrian \$\flat 3\$](#) (lower III), [Locrian](#) (raise IV), [Phrygian \$\sharp 4\$](#) (raise V), [Superlocrian \$\sharp 6\$](#) (raise VI), [Ultralocrian](#) (lower VII), [Superlocrian Maj7](#) (raise VII)

Subset scales: [Raga Gurjari Todi](#) (drop IV), [Sho \$\sharp 2\$](#) (VI)

Superset scales: [Spanish Octatonic](#) (add 4)

Chords: C7/ $\flat 9$ / $\sharp 9$ / $\sharp 11$ / $\flat 13$ (dominant chords with any combination of these alterations)

The Altered Dominant scale has a very distinctive sound and is often the primary choice for dominant chords with all altered notes (that is, $\flat 9$, $\sharp 9$, $\sharp 11$, and $\flat 13$).

This scale appeared in the works of Debussy, Ravel (hence the alternate Ravel name), and modern composer Steve Reich.



Harmonic Minor



Alternate names: Mischung 4 (Germany), Mohammedan, Maqam Bayat-e-Esfahan (Iraq), Maqam Sultani Yakah (Iraq), Sultani Yakah, Zhalibny Minor, Raga Pilu That, Mela Kiravani, Raga Kiranavali, Raga Kirvani, Raga Kalyana Vasanth, Raga Deshi 3 – scale 1078 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Modes: [Locrian #6](#) (II), [Ionian Augmented](#) (III), [Romanian Minor](#) (IV), [Phrygian Dominant](#) (V), [Lydian #2](#) (VI), [Ultralocrian](#) (VII)

Intervals: 2 1 2 2 1 3 1 – mirror scale of the [Harmonic Minor Inverse](#) scale

Similar scales: [Neapolitan Minor](#) (lower degree II), [Harmonic Major](#) (raise III), [Sabach Maj7](#) (lower IV), [Gypsy Minor](#) (raise IV), [Harmonic Minor b5](#) (lower V), [Melodic Minor](#) (raise VI), [Aeolian](#) (lower VII)

Subset scales: [Raga Takka](#) (drop II), [Raga Bhinna Pancama](#) (III), [Raga Ghantana](#) (V), [Raga Sindhura Kafi](#) (VI)

Superset scales: [Harmonic Neapolitan Minor](#) (add b2), [Algerian Octatonic](#) (b5), [Bebop Melodic Minor](#) (6), [Bebop Harmonic Minor](#) (b7)

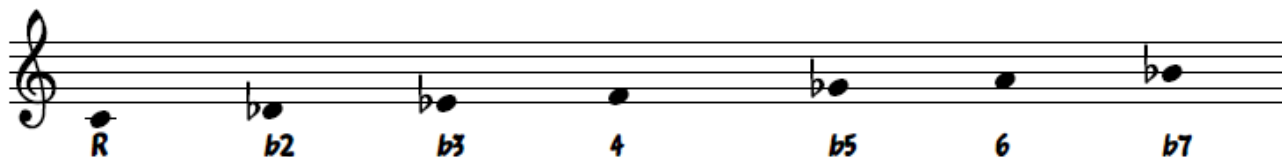
Chords: Cmin/maj7, Cmin/b6

The Harmonic scale and its modes have a very distinctive sound, given by the augmented 2nd interval (3 semitones) between the 6th and 7th degrees.

In classical music this scale has been used more sparingly than the Melodic Minor scale, by composers such as Bach, Mozart and Schubert (*String Quartet 1, movement 1*), usually in its descending form rather than ascending form.



Locrian #6



Alternate names: Locrian Natural Maj6, Dorian ♭9 - scale 1070 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode II of [Harmonic Minor](#) scale (C Locrian Maj7 = B♭ Harmonic Minor)

Intervals: 1 2 2 1 3 1 2 – mirror scale of the [Lydian Diminished](#) scale

Similar scales: [Blues Heptatonic](#) (raise degree II), [Oriental](#) (raise III), [Superlocrian #6](#) (lower IV), [Dorian ♭2](#) (raise V), [Locrian](#) (lower VI), [Neapolitan Major ♭5](#) (raise VII)

Subset scales: [Honkoshi](#) (drop VI), [Double Phrygian](#) (VII)

Superset scales: [Maqam Shadd'araban](#) (add 3)

Chords: Cm7/♭5, C7/♭9/#9/#11



Ionian Augmented



Alternate names: Ionian #5, Harmonic Major 2

Mode: mode III of [Harmonic Minor](#) scale (C Ionian Augmented = A Harmonic Minor)

Intervals: 2 2 1 3 1 2 1 – mirror scale of the [Phrygian ♭4](#) scale

Similar scales: [Ionian Augmented ♭9](#) (lower degree II), [Ionian Augmented #2](#) (raise II), [Jazz Minor #5](#) (lower III), [Lydian Augmented](#) (raise IV), [Major](#) (lower V), [Mixolydian Augmented](#) (lower VII)

Subset scales: [Raga Hamsa Vinodini](#) (drop V), [Raga Sarasanana](#) (VI)

Superset scales: [Bebop Major](#) (add 5)

Chords: Cmaj7/#5

The Ionian Augmented scale can be obtained by raising the 5th degree of the [Major](#) scale.



Romanian Minor



Alternate names: Dorian #4, Gnossiennes, Ukrainian Minor, Ukranian Dorian, Tunisian, Kaffa (Ethiopia), Maqam Hedjaz (Iraq), Maqam Nakriz (Iraq) Misheberekh (Jewish), Nigriz (Greece), Peiraiotikos Minor (Greece), Souzinak (Greece), Mela Hemavati, Raga Desisimharavam – scale 1064 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode IV of [Harmonic Minor](#) scale (C Romanian = G Harmonic Minor)

Intervals: 2 1 3 1 2 1 2 – mirror scale of the [Blues Heptatonic](#) scale

Similar scales: [Dorian b9 #11](#) (lower degree II), [Lydian Dominant](#) (raise III), [Dorian](#) (lower IV), [Gypsy](#) (lower VI), [Lydian Diminished](#) (raise VII)

Subset scales: [Raga Madhukauns](#) (drop II), [Raga Sarasvati](#) (III), [Raga Manavi](#) (IV), [Raga Gopikatilaka](#) (VI), [Raga Vijayanagari](#) (VII)

Superset scales: [Blues Octatonic](#) (add 4), [Raga Chinthamani](#) (b6)

Chords: Cm7/#11, Cm9/#11, Cdim7

The Romanian scale can be thought of as a Dorian mode with a raised 4th degree. It is often used in Klezmer Bulgarish music and other Eastern Europe music styles. It has been used also by composers such as Bert Kaempfert (*Sweet Maria* tune), Eric Satie (hence the alternate name Gnossiennes), and George Gershwin.



Phrygian Dominant



Alternate names: Phrygian Major, Harmonic Major inverse, Spanish or Spanish Gipsy, Zilof (Spain), Dorico Flamenco (Spain), Jewish, Avaha or Ahava Rabba (Jewish), Freygish (or Fraigish), Hitzaz (or Hijaz, Greece), Alhijaz (Saudi Arabian), Maqam Humayun (Iraq), Maqam Zengule (Iraq), Maqam Hijaz-Nahawand (Iraq), Humayun (Iraq), Mela Vakulabharanam, Raga Jogiya, Raga Vativasanta – scale 1053 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode V of [Harmonic Minor](#) scale (C Phrygian Dominant = F Harmonic Minor)

Intervals: 1 3 1 2 1 2 2 – mirror scale of the [Harmonic Major](#) scale

Similar scales: [Melodic Major](#) (raise degree II), [Phrygian](#) (lower III), [Mela Namanarayani](#) (raise IV), [Locrian Dominant](#) (lower V), [Harmonic Minor Inverse](#) (raise VI), [Mela Gayakapriya](#) (lower VII), [Double Harmonic](#) (raise VII)

Subset scales: [Raga Kamalamanohari 2](#) (drop II), [Insen](#) (III), [Raga Lalita Bhairav](#) (V), [Raga Gaula](#) (VI)

Superset scales: [Flamenco](#) (add b3), [Maqam Hijaz](#) (7)

Chords: C7, C7/b9/b13

The Phrygian Dominant scale can be found in jazz compositions by Charles Mingus (*Ysabel's Table Dance*, *Don't Let It Happen Here*, *The Black Saint and The Sinner Lady*). It was used in classical music by Franz Liszt (*B-minor Sonata*, closing bars).



Lydian #2



Alternate names: Hungarian Major 2, Periarotikos (Greece), Mela Kosalam, Raga Kuksumakaram (or Kusumakaram)

Mode: mode VI of [Harmonic Minor](#) scale (C Lydian #2 = E Harmonic Minor)

Intervals: 3 1 2 1 2 2 1 – mirror scale of the [Locrian b7](#) scale

Similar scales: [Lydian](#) (lower degree II), [Houzam](#) (lower IV), [Aeolian b1](#) (raise V), [Mela Dhatuvardhani](#) (lower VI), [Lydian #2 #6](#) (raise VI), [Hungarian Major](#) (lower VII)

Subset scales: [Lydian #2 Hexatonic](#) (drop IV), [Raga Rasamanjari 2](#) (VI)

Superset scales: [Shostakovich](#) (add b2)

Chords: Cmaj7/b5, Cmaj7/#9, Cmaj7/#11



Ultralocrian



Alternate names: Mixolydian #1

Mode: mode VII of [Harmonic Minor](#) scale (C UltraLocrian = D \flat Harmonic Minor)

Intervals: 1 2 1 2 2 1 3 – mirror scale of the [Aeolian](#) $\flat 1$ scale

Similar scales: [Ultralocrian](#) $\flat 3$ (lower degree III), [Locrian](#) $\flat 7$ (raise IV), [Ultraphythmic](#) (raise V), [Superlocrian](#) $\flat 6$ $\flat 7$ (lower VI), [Altered Dominant](#) (raise VII)

Subset scales: [Raga Hejjajji](#) (drop III)

Superset scales: [Magen Abot](#) (add 7)

Chords: Cdim7



Symmetrical Scales

Whole-Tone



Alternate names: Hexatonic, Anhemitonic Hexatonic, Messiaen 1st Mode, Raga Sahera, Raga Gopriya – scales 36 and 569 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Intervals: 2 2 2 2 2 – mirror scale of itself

Similar scales: [Takemitsu Tree 2](#) (lower degree III), [Prometheus](#) (raise V), [Eskimo Hexatonic](#) (lower VI), [Eskimo Hexatonic 2](#) (raise VI)

Subset scales: [Pentatonic Whole-Tone](#) (drop II)

Superset scales: [Superlocrian b3](#) (add b2), [Semilocrian b4](#) (b3), [Major Locrian](#) (4), [Lydian Dominant b6](#) (5), [Lydian Augmented Dominant](#) (6), [Leading Whole-Tone](#) (7)

Chords: Caug, C7/#5, Caug7/#11

The Whole-Tone scale is symmetrical and exist only two different versions of this scale. It can be obtained by combining two augmented triads that are one whole tone apart (e.g. C-E-G# and D-F#-A#).

In classical music, the Whole-Tone scale has been used by Mozart (*Musical Jokes* for strings and horns), Liszt (*Dante Symphony*), Berlioz, Schubert, Glinka (*Ruslan and Lyudmila*, overture), Borodin (*Prince Igor*), Rimsky-Korsakov (*Sadko*), Debussy, Alan Berg (*Violin Concert*), Bartók (*Fifth String Quartet*), and Busoni. This scale appears in many jazz compositions and improvisations, such as *JuJu* (Wayne Shorter), *One Up, One Down* (John Coltrane). Art Tatum and Thelonious Monk have used this scale extensively. It appears in bar 3 and 4 of the opening of *You Are The Sunshine of My Life* (Stevie Wonder).



Augmented



Alternate names: Major Augmented, Messiaen Truncated 3rd Mode Inverse, Genus Tertium, Raga Devamani – scale 182 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Modes: [Augmented Inverted](#) (II)

Intervals: 3 1 3 1 3 1 – mirror scale of the [Augmented Inverted](#) scale

Similar scales: [Raga Latika](#) (lower degree II), [Raga Takka](#) (raise III), [Lydian #2 Hexatonic](#) (raise V)

Subset scales: [Augmented Pentatonic](#) (drop VI)

Superset scales: [Phrygian b4 Maj7](#) (add b2), [Sabach Maj7](#) (2), [Sengiach](#) (4), [Mela Dhatuwardhani](#) (b5)

Chords: Caug, Cmaj7/#5, C7/#5/#9

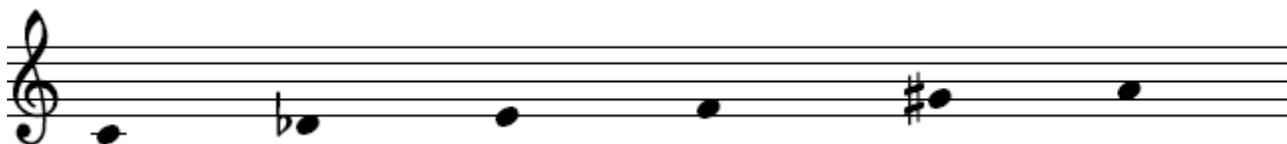
The Augmented scale is symmetrical and exist only four different versions of this scale. It can be obtained by combining two augmented triads that are one half tone apart (e.g. C-E-G# and C#-F-A).

It made its first appearance in the work of Franz Liszt (*Faust Symphony*) and was used by Shostakovich (*Second Piano Trio*, finale), Ginastera, Prado, Bartók, Babbitt, and Schoenberg.

The scale has been extensively used in the late 50s and early 60s, by players such as Oliver Nelson (*Stolen Moments*), John Coltrane, and Michael Brecker.



Augmented Inverted



Alternate names: Messiaen 2nd Mode, Prometheus Liszt, Tcherepnin Hexatonic – scale 181 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: Mode II of [Augmented](#) scale (C Augmented Inverted = B Augmented)

Intervals: 1 3 1 3 1 3 – mirror scale of the [Augmented](#) scale

Similar scales: [Raga Hejjajji](#) (raise degree IV), [Raga Kalavati](#) (lower V), [Raga Lalita Bhairav](#) (raise VI)

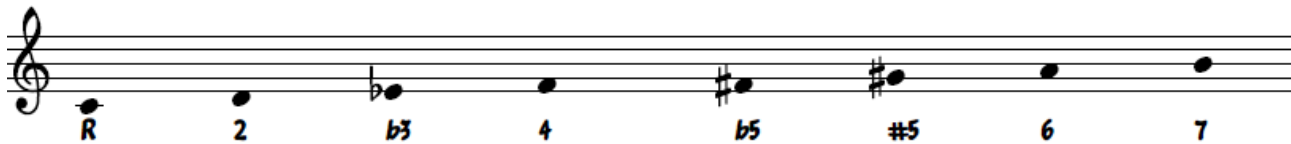
Subset scales: [Syrian Pentatonic](#) (drop VI)

Superset scales: [Gypsy Hepatonic](#) (add 5), [Mixolydian Augmented Maj9](#) (b7), [Ionian Augmented](#) ♭9 (7)

Chords: C^{aug}, C^{aug}6, C^{aug}/♭9



Diminished



Alternate names: Octatonic, Whole-Tone Diminished, Messiaen 2nd Mode Inverse, Modus Conjunctus – scales 20 and 393 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Modes: Diminished Half-tone (II)

Intervals: 2 1 2 1 2 1 2 1 – mirror scale of the Diminished Half-tone scale

Similar scales: Bebop Melodic Minor (raise degree V)

Subset scales: Nohkan (drop III), Jazz Minor #5 (V), Jeths (VI), Harmonic Minor ♭5 (VII), Hungarian Major Inverse (VIII)

Chords: Cdim7, Cdim7/9, Cdim9/#11

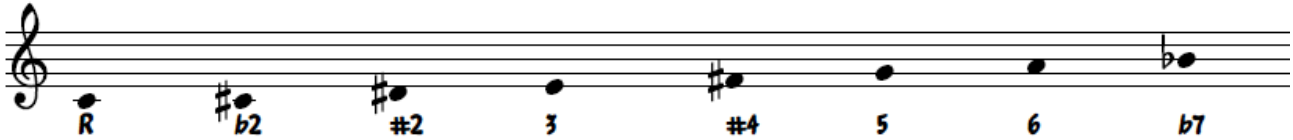
The Diminished scale is symmetrical and exist only three different versions of this scale. It can be obtained by combining two diminished 7th chords that are one whole tone apart (e.g. C-E♭F♯-A and C♯-E-G-B♭).

This scale has been extensively used in Western music, by composers such as Scalatti, Liszt (*Feux Follets*), Glinka (*Ruslan and Lyudmila*), Rimsky-Korsakov (*Kashchey the Immortal*), Stravinsky (*Petrushka*, *The Rite of Spring*, *Concert for Piano and Wind Instruments*), Debussy, Ravel, Scriabin, Bartók (*Batagelles*, *Improvisations*, *Fourth Quartet*, *Cantata Profana*, *Mikrokosmos 99, 101 and 109*), Bloch, Khatchaturian, Messiaen, Milhaud, Poulenc, Prokofiev, Shostakovish.

The diminished scale is very frequently used in jazz composition and improvisation, in both its modes (see Diminished Half-tone scale).



Diminished Half-tone



Alternate names: Messiaen 2nd Mode – scale 392 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode II of [Diminished](#) scale (C Diminished Half-tone = B \flat Diminished)

Intervals: 1 2 1 2 1 2 1 2 – mirror scale of the [Diminished](#) scale

Similar scales: [LG Octatonic](#) (lower degree V), [Shostakovich](#) (raise VIII)

Subset scales: [Hungarian Major](#) (drop II), [Romanian Major](#) (III), [Dorian \$\flat 9\$ #11](#) (IV), [Dorian \$\flat 2\$ \$\flat 4\$](#) (V), [Superlocrian #6](#) (VI), [Superlocrian \$\flat 6\$ \$\flat 7\$](#) (VIII)

Superset scales: [Nonatonic 2](#) (add 4)

Chords: C7/ $\flat 9$, C7/#9, C7/#11

Together with the Altered scale, the Diminished Half-tone scale is the primary choice for altered dominant chord. As such, it has been extensively used by virtually all bop and post-bop improvisers.



Chromatic



Intervals: 1 1 1 1 1 1 1 1 1 1 1 – mirror scale of itself

The chromatic scale contains all 12 notes used in Western well-tempered music system. Even though in theory it is possible to name 12 different chromatic scale, in practice there is only one of such scale.

The Chromatic scale is rarely used in its entirety in tonal or modal jazz, because it will sound as dissonant over virtually any chord. However, fast chromatic phrases are often used to connect chordal or non-dissonant tones.

Tritone



Alternate names: Petrushka chord – scale 7 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Modes: [Raga Neelangi](#) (III)

Intervals: 1 3 2 1 3 2

Similar scales: [Raga Gaula](#) (lower degree IV), [Raga Gamakakriya](#) (raise VI)

Subset scales: [Raga Manaranjani](#) (drop IV)

Superset scales: [Chromatic Mixolydian 2](#) (add 2), [Mela Namanarayani](#) (b6), [Romanian Major](#) (6), [Mela Visvambhari](#) (7)

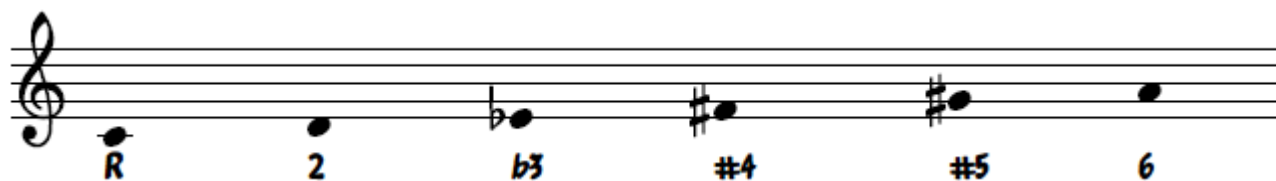
Chords: Cm7

The Tritone scale is symmetrical and exist only six different versions of this scale. It can be obtained by combining two major triads that are one tritone apart (e.g. C-E-G and Gb-Bb-Db).

This scale is enharmonically equivalent to the Petrushka chord, named after Stravinsky's ballet *Petrushka*.



Raga Neelangi



Alternate names: scale 9 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode III of [Tritone](#) scale (C Neelangi = G# Tritone)

Intervals: 2 1 3 2 1 3

Similar scales: [Eskimo Hexatonic](#) (raise degree III), [Raga Vijayanagari](#) (lower V), [Takemitsu Tree 2](#) (raise VI)

Superset scales: [Hungarian Major Inverse](#) (add 4), [Mela Syamalangi](#) (5)

Chords: Cdim

Raga Neelangi is a symmetrical Indian raga, only six different versions of this scale exist. It can be obtained by removing the 4th and 8th note of a [Diminished](#) scale.



Messiaen 2nd Mode Truncated



Alternate names: scale 6 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Intervals: 1 2 3 1 2 3

Similar scales: [Raga Vijayanagari](#) (raise degree II), [Raga Chandrajyoti](#) (lower III)

Subset scales: [Major Pentatonic b3](#) (drop V)

Superset scales: [Superlocrian b6 b7](#) (add 3), [Mela Gavambodhi](#) (b6), [Dorian b9 #11](#) (b7), [Mela Suvarnangi](#) (7)

Chords: C7/#11, C7/b9/#9/#11

Messiaen modes are a family of scales compiled by French composer Olivier Messiaen and published in his book *La technique de mon langage musical* ("The technique of my musical language"). These scales were also widely used by composer Tōru Takemitsu, especially the 3rd Mode. These scales are symmetrical and of limited transposition, that is, there exist fewer than 12 distinct scales; for example, only four distinct [Messiaen 3rd Mode](#) scales exist, because the scales built on E and G# are identical and contain the same notes as the scale built on C, the scales built on F and A are identical to the scale built on C#, etc.

The set of Messiaen scales includes all the limited transposition scales that can be built with the 12 notes of the tempered system. The Messiaen 1st Mode is more commonly known as the [Whole-Tone](#) scale, the Messiaen 2nd Mode is the same as the [Diminished Half-tone](#) scale. Even more symmetrical scales can be obtained by "truncating", that is, by dropping two or more notes from one of the more complete scales. Only 3rd and 7th Modes are not truncated modes, and all others can be obtained from them: [3rd Mode](#) contains 1st Mode, [7th Mode](#) contains [2nd Mode](#), [4th Mode](#), and [6th Mode](#); [5th Mode](#) is a truncated form of [6th Mode](#).

More specifically, Messiaen 2nd Mode Truncated is obtained by dropping the 4th and 8th note of [Messiaen 2nd Mode](#).



Messiaen 3rd Mode



Alternate names: scale 185 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

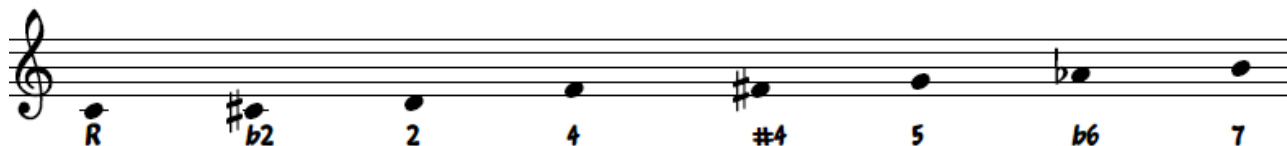
Modes: [Genus Chromaticum](#) (III)

Intervals: 2 1 1 2 1 1 2 1 1

Chords: Caug7, Caug/maj7



Messiaen 4th Mode



Alternate names: scale 16 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Modes: [Messiaen 4th Inverse](#) (III)

Intervals: 1 1 3 1 1 1 3 1

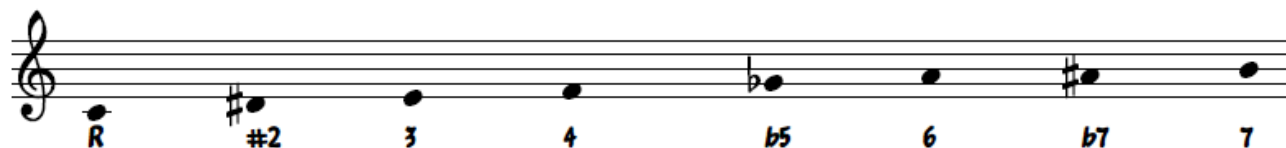
Similar scales: [Bebop Half-diminished](#) (raise degree III)

Subset scales: [Mela Jhalavarli](#) (drop IV), [Mela Ganamurti](#) (V)

Chords: Csus/maj7



Messiaen 4th Mode Inverse



Mode: mode III of [Messiaen 4th Mode](#) (C Messiaen 4th Mode Inverse = B \flat Messiaen 4th Mode)

Intervals: 3 1 1 1 3 1 1

Chords: Cmaj7/ \flat 5, C7/ \flat 5



Messiaen 5th Mode



Alternate names: scale 8 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Modes: [Messiaen 5th Mode Inverse](#) (II), [Two-Semitone Tritone](#) (III)

Intervals: 1 4 1 1 4 1 – mirror scale of itself

Similar scales: [Raga Gamakakriya](#) (lower degree III)

Subset scales: [Raga Gowla](#) (drop IV)

Chords: Csus/maj7



Messiaen 5th Mode Inverse



Alternate names: scale 13 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode II of [Messiaen 5th Mode](#) (C Messiaen 5th Mode Inverse = B Messiaen 5th Mode)

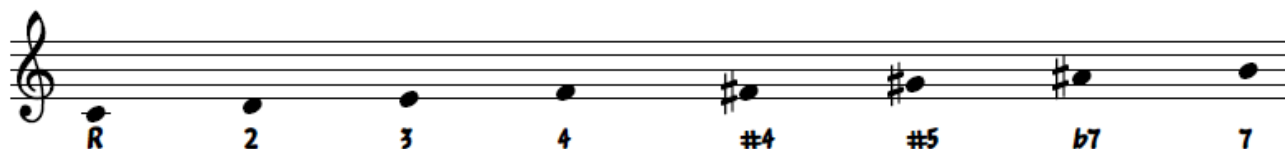
Intervals: 4 1 1 4 1 1 – mirror scale of the [Two-semitone Tritone](#) scale

Similar scales: [Raga Tilang](#) (raise degree IV)

Chords: Cmaj7/#11, C7/#11



Messiaen 6th Mode



Alternate names: scale 21 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Modes: [Messiaen 6th Mode Inverse](#) (III)

Intervals: 2 2 1 1 2 2 1 1 – mirror scale of the [Messiaen 6th Mode Inverse](#) scale

Similar scales: [Enigmatic Mixed](#) (lower degree II)

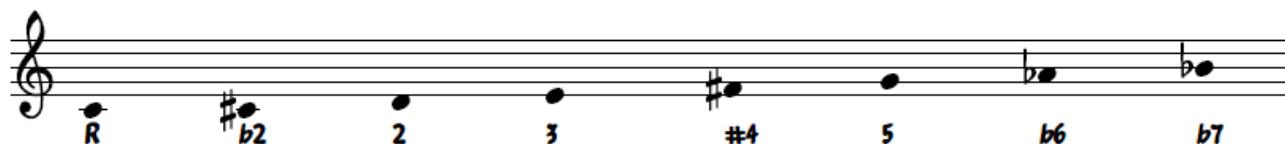
Subset scales: [Leading Whole-Tone](#) (drop IV), [Major Locrian](#) (VIII)

Chords: C7/#5, C7/#5/#11

It should be noted that this scale contains the first 4 notes of the [Major](#) scale, followed by the first 4 notes of of the Major scale built a tritone above.



Messiaen 6th Mode Inverse



Alternate names: scale 15 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode III of [Messiaen 6th Mode](#) (C Messiaen 6th Mode Inverse = A^b Messiaen 6th Mode)

Intervals: 1 1 2 2 1 1 2 2 – mirror scale of the [Messiaen 6th Mode](#) scale

Subset scales: [Lydian Dominant b6](#) (drop II), [Mela Namanarayani](#) (III), [Mela Jalarnava](#) (IV), [Superlocrian b3](#) (VI), [Chromatic Mixolydian 2](#) (VII)

Superset scales: [Symmetrical Nonatonic](#) (add 7)

Chords: C7, C7/#5, C7/b9, C7/#11



Messiaen 7th Mode



Alternate names: scale 23 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Modes: [Symmetrical Decatonic](#) (II), [Messiaen 7th Inverse](#) (IV)

Intervals: 1 1 1 2 1 1 1 2 1

Chords: Cmaj7/b5, Cdim7



Messiaen 7th Mode Inverse



Alternate names: scale 26 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode IV of [Messiaen 7th Mode](#) (C Messiaen 7th Mode Inverse = A Messiaen 7th Mode)

Intervals: 2 1 1 1 1 2 1 1 1

Similar scales: [Major Minor Mixed](#) (raise degree VI), [Minor Pentatonic with Leading Tones](#) (lower VII)

Chords: Cmaj7/b5, C7/b5

This scale is built by reversing the interval sequence of the IV mode of the [Messiaen 7th Mode](#).



Genus Chromaticum



Alternate names: Messiaen 3rd Mode Inverse, Tcherepnin (Russia) – scale 184 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode III of [Messiaen 3rd Mode](#) (C Genus Chromaticum = A Messiaen 3rd Mode)

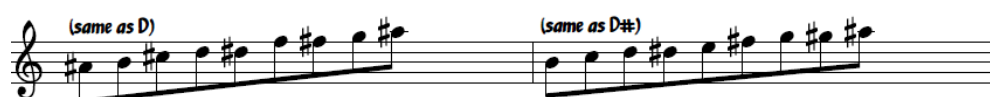
Intervals: 1 2 1 1 2 1 1 2 1 – mirror scale of itself

Subset scales: [Raga Saurashtra](#) (drop III)

Similar scales: [Chromatic Permutated Diatonic Dorian](#) (lower degree III), [Moorish Phrygian](#) (raise VIII)

Chords: Cmin/maj7

This scale is sometimes named after contemporary Russian composer Alexander Tcherepnin, who described it in his *Basic Elements of My Musical Language* book.



Two-semitone Tritone



Alternate names: scale 5 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode III of [Messiaen 5th Mode](#) scale (C Two-semitone Tritone = G Messiaen 5th Mode)

Intervals: 1 1 4 1 1 4 – mirror scale of the [Messiaen 5th Mode Inverse](#) scale

Similar scales: [Raga Chandrajyoti](#) (raise degree VI)

Subset scales: [Raga Saugandhini](#) (drop III), [Raga Nabhomani](#) (VI)

Superset scales: [Mela Salaga](#) (add 6), [Mela Jalarnava](#) (b7), [Mela Jhalavarli](#) (7)

Chords: Caug, C7/#5, C7/#11

The Two-semitone Tritone scale is symmetrical and exist only six different versions of this scale. Its name describes how the scale is created, i.e. semitone + semitone + major third. This scale was first described by Nicolas Slonimsky in his *Thesaurus of Scales and Melodic Patterns* book.



Symmetrical Decatonic



Alternate names: scale 24 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode II of [Messiaen 7th Mode](#) (C Symmetrical Decatonic = B Messiaen 7th Mode)

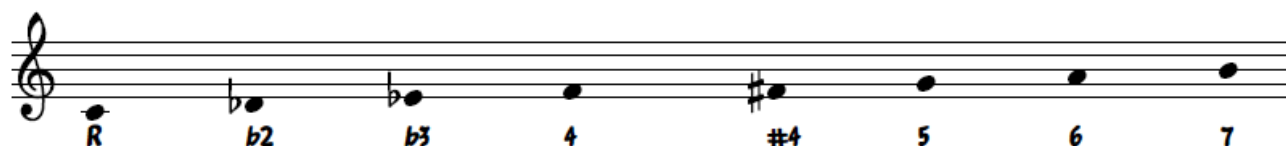
Intervals: 1 1 2 1 1 1 2 1 1 – mirror scale of itself

Subset scales: [Symmetrical Nonatonic](#) (drop V)

Chords: Cmaj7, Cmaj7/♭5, Cmaj7/#5, C7, C7/♭5, C7/#5, C7/#5/♭9



Van Der Host



Alternate names: scale 17 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode IV of [Messiaen 6th Mode](#) (C Van Der Host = G Messiaen 6th)

Intervals: 1 2 2 1 1 2 2 1 – mirror scale of itself

Similar scales: [Raga Bhatiyar](#) (raise degree III), [Shostakovich](#) (lower IV), [Bebop Half-diminished](#) (lower VII)

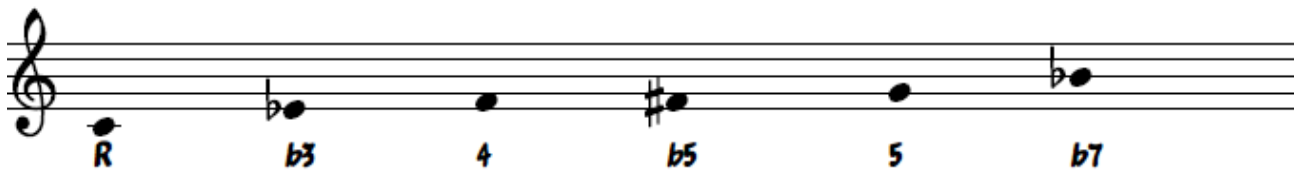
Subset scales: [Mela Suvarangi](#) (drop IV), [Neapolitan Major](#) (V), [Neapolitan Major \$b5\$](#) (VI)

Chords: C7/ $b5$, C7/ $\#5$



Jazz Scales

Blues



Alternate names: Blues Hexatonic, Raga Nileschwari

Modes: [Raga Hamsanandi](#) (IV), [Raga Malkauns](#) (V), [Blues Major](#) (VI)

Intervals: 3 2 1 1 3 2

Similar scales: [Blues Minor Maj7](#) (raise degree VI)

Subset scales: [Raga Samudhra Priya](#) (drop III), [Minor Pentatonic](#) (IV), [Minor Pentatonic 7 b5](#) (V)

Superset scales: [Blues Phrygian](#) (add b2), [Blues Modified](#) (2), [Blues Mixed](#) (3), [Blues Heptatonic 2](#) (6), [Blues Leading Tone](#) (7)

Chords: C7, C7/b5, C7/#11

The Blues scale is one of the most widely used scales in jazz of any era. It is the primary choice for the typical 12-bar blues progression, in which case it is often used modally (e.g. the C Blues scale is used over all the chords of a C major blues progression).



Blues Major



Mode: mode VI of [Blues](#) scale (C Blues Major = A Blues)

Intervals: 2 1 1 3 2 3

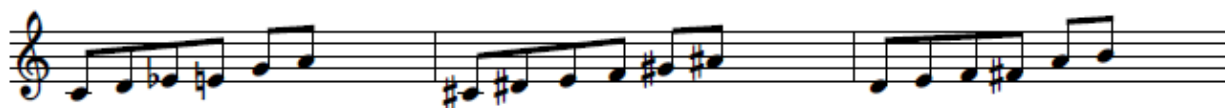
Similar scales: [Blues Dorian Hexatonic](#) (lower degree II), [Sho](#) (raise IV)

Subset scales: [Raga Mohanangi](#) (drop II), [Major Pentatonic](#) (III), [Dorian Pentatonic](#) (IV)

Superset scales: [Chromatic Hypodorian](#) (add b6), [Bebop Minor](#) (b7)

Chords: C7, C7/#11

This variation of the Blues scale contains both the minor and the minor 3rd.



Pentatonic Scales

Major Pentatonic



Alternate names: Ryosen (Japan), Yona Nuki Major (Japan), Man Jue (China), Gong (China), Peruvian Major Pentatonic, Ghana Pentatonic 2, Tezeta Major or Tizita (Ethiopia), Raga Bilahari ascending, Raga Mohanam, Raga Bhopali, Raga Deskar, Raga Kokila, Raga Jait Kalyan, Raga Bhup – scale 1162 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Modes: [Suspended Pentatonic](#) (II), [Man Gong](#) (III), [Ritusen](#) (IV), [Minor Pentatonic](#) (V)

Similar scales: [Major Pentatonic \$\flat 2\$](#) (lower degree II), [Raga Mohanangi](#) (raise II), [Dorian Pentatonic](#) (lower III), [Ritusen](#) (raise III), [Kung](#) (lower IV), [Major Pentatonic \$\flat 6\$](#) (lower V), [Dominant Pentatonic](#) (raise V)

Superset scales: [Blues Major](#) (add $\flat 3$), [Scottish Hexatonic](#) (4), [Raga Airavati](#) ($\flat 5$), [Bebop Major Hexatonic](#) ($\flat 6$), [Mixolydian Hexatonic 2](#) ($\flat 7$), [Lydian Hexatonic](#) (7)

Intervals: 2 2 3 2 3 – mirror scale of the [Man Gong](#) scale

Chords: Cmaj7, Cmaj6, Cmaj9, Cmaj13, C7, C9, C13 – also Fmaj7, Fmaj9, B \flat maj7/ $\flat 5$, B \flat maj7/#11, F#7/ $\flat 5$ /#5/ $\flat 9$ /#9

The Major Pentatonic (or just Pentatonic) scale and its four modes are by far the most common 5-note scales in Western music, including jazz and rock music. The absence of semitones in the scale encourages playing every note without having to resolve to a chord tone. John Coltrane, Art Tatum, Chick Corea, and Herbie Hancock are just a few of the jazz musicians who have massively used pentatonic scales in their compositions and improvisations.

In addition to using the Major Pentatonic scale on chords with same root as the scale, you can use it on major chords a perfect fourth or a major second below the scale root (e.g. C Major Pentatonic on F and B \flat major chords), and on dominant altered chords a tritone above the scale root (e.g. C Major Pentatonic on F#7/ $\flat 5$ /#5/ $\flat 9$ /#9).



Suspended Pentatonic



Alternate names: Egyptian, Ambassel (Ethiopia), Yematebela Wofe (Ethiopia), Yosenpo (Japan), Shang-Diao (China), Jin-Yu or Quin-Yu (China), Rui Bin (China), Slendro (Indonesia), Raga Madhmat Sarang, Raga Madhyamavati

Mode: mode II of [Major Pentatonic](#) scale (C Suspended Pentatonic = B \flat Major Pentatonic)

Intervals: 2 3 2 3 2 – mirror scale of itself

Similar scales: [Kokin-Choshi](#) (lower degree II), [Minor Pentatonic](#) (raise II), [Dominant Pentatonic](#) (lower III), [Chaio](#) (raise IV), [Ritusen](#) (lower V), [Tcherepnin Major Pentatonic](#) (raise V)

Superset scales: [Minor Hexatonic](#) (add b3), [Raga Siva Kambhoji](#) (3), [Raga Navamanohari](#) (b6), [Mixolydian Hexatonic](#) (6), [Raga Brindabani](#) (7)

Chords: Csus7, Csus7/9



Modal Scales

Ionian $\flat 5$



Alternate names: scale 1074 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode II of [Blues Phrygian](#) scale (C Ionian $\flat 5$ = B Blues Phrygian)

Intervals: 2 2 1 1 3 2 1 – mirror scale of the [Mela Bravapriya](#) scale

Similar scales: [Chromatic Lydian](#) (lower degree II), [Jeths](#) (lower III), [Major](#) (raise V), [Mixolydian \$\flat 5\$](#) (lower VII)

Subset scales: [Raga Mruganandana](#) (drop IV), [Raga Hamsa Vinodini](#) (V)

Superset scales: [Ichikotsucho](#) (add 5)

Chords: Cmaj7/ $\flat 5$

Origin: Nicolas Slonimsky's textbook.



Ionian Augmented #2



Mode: mode VI of [Double Harmonic](#) scale (C Ionian Augmented #2 = E Double Harmonic)

Intervals: 3 1 1 3 1 2 1 – mirror scale of the [Ultraphythmic](#) scale

Similar scales: [Ionian Augmented](#) (lower degree II), [Aeolian b1](#) (raise IV), [Houzam](#) (lower V), [Chromatic Phrygian](#) (raise VI), [Chromatic Hypodorian Inverse](#) (lower VII)

Chords: Cmaj7/#5



European Scales

Adonai Malakh



Mode: mode III of [Spanish Octatonic](#) scale (C Adonai Malakh = A Spanish Octatonic)

Intervals: 1 1 1 2 2 2 1 2 – mirror scale of the [Raga Mian Ki Malhar](#) scale

Similar scales: [Phrygian Aeolian](#) $\flat 4$ (lower degree VII)

Subset scales: [Dorian](#) (drop II), [Dorian](#) $\flat 2$ (III), [Mela Venaspati](#) (IV)

Superset scales: [Chromatic Diatonic Dorian](#) (add $\flat 6$)

Chords: Cm7

Adonai Malakh scale is a Jewish scale that can be obtained from the [Dorian](#) mode by adding a passing note between the root and the 2nd degree.



Enigmatic



Alternate names: scale 1059 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Modes: [Mela Kantamani](#) (III ascending), [Mela Dhavalambari](#) (III, descending), [Mela Manavati](#) (VII ascending)

Intervals: 1 3 2 2 2 1 1 (ascending), 1 3 1 3 2 1 1 (descending)

Similar scales: [Leading Whole-Tone](#) (raise degree II), [Enigmatic Minor](#) (lower III), [Mela Visvambhari](#) (lower V)

Superset scales: [Enigmatic Mixed](#) (add 4)

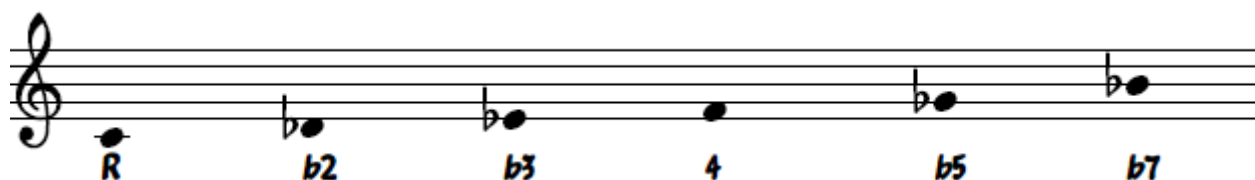
Chords: Cmin/maj7

The Enigmatic scale is a very unusual scale with elements from major, minor and whole-tone scales. Also, its descending version has a perfect 4th instead of a raised 4th. It was invented by Italian composer Giuseppe Verdi, who used it in his *Ave Maria*. It was also used by guitarist Joe Satriani in his piece *The Enigmatic*.



Asian Scales

Honkoshi



Modes: [Raga Hamsa Vinodini](#) (II), [Raga Manavi](#) (III), [Insen](#) (IV)

Intervals: 1 2 2 1 4 2 – mirror scale of the [Raga Nishadi](#) scale

Similar scales: [Sho #2](#) (lower degree IV), [Raga Gandharavam](#) (raise V), [Double Phrygian](#) (lower VI)

Subset scales: [Minor Pentatonic 7 b5](#) (drop II), [Iwato](#) (III)

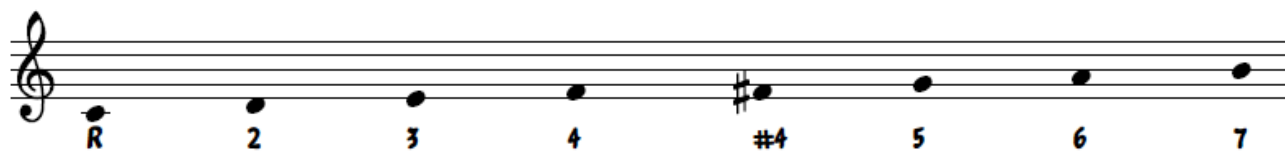
Superset scales: [Blues Phrygian](#) (add 5), [Locrian](#) (b6), [Locrian #6](#) (6)

Chords: Cm7/b5

Origin: Japan



Ichikotsucho



Alternate names: Major-Lydian Mixed, Gregorian 5, Genus Diatonicum Veterum Correctum, Kubilai (Mongolia), Ishikotsucho (Japan), Raga Bihag, Raga Gaud Sarang, Raga Hamir Kalyani, Raga Kedar, Raga Yaman Kalyan, Raga Chayanat

Mode: mode IV of [Bebop](#) scale (C Ichikotsucho = G Bebop)

Intervals: 2 2 1 1 1 2 2 1 – mirror scale of the [Bebop Locrian](#) scale

Similar scales: [Raga Bhatiyar](#) (lower degree II)

Subset scales: [Lydian](#) (drop IV), [Major](#) (V), [Ionian b5](#) (VI)

Superset scales: [Lydian Mixolydian](#) (add b7)

Chords: Cmaj7, Cmaj7/#11

This Japanese scale can be obtained by merging the [Major](#) and [Lydian](#) scales.



Indian Scales

Mela Bhavapriya



Alternate names: Raga Bhavani, Raga Kalamurti – scale 1060 of Slonimsky's *Thesaurus of Scales and Melodic Patterns*

Mode: mode VI of [Rock 'n Roll](#) scale (C Mela Bhavapriya = Eb Rock 'n Roll)

Intervals: 1 2 3 1 1 2 2 – mirror scale of the [Ionian b5](#) scale

Similar scales: [Gypsy](#) (raise degree II), [Mela Jalarnava](#) (lower III), [Mela Namanarayani](#) (raise III), [Phrygian](#) (lower IV), [Dorian b9 #11](#) (raise VI), [Mela Gavambodhi](#) (lower VII), [Chromatic Lydian Inverse](#) (raise VII)

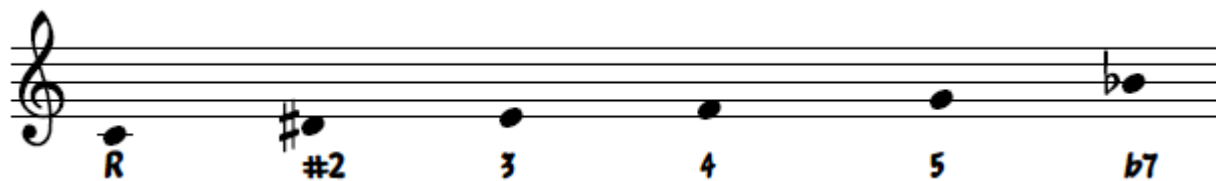
Subset scales: [Raga Kashyapi](#) (drop IV), [Raga Gurjari Todi](#) (V)

Superset scales: [Bebop Locrian](#) (add 4), [Neveseri](#) (7)

Chords: Cm7/b5



Mela Calanata



Alternate names: Raga Bhanumanjari, Raga Jog

Modes: [Raga Gurjari Todi \(III\)](#), [Raga Brindabani \(IV\)](#)

Intervals: 3 1 1 2 3 2

Similar scales: [Raga Siva Kambhoji \(lower degree II\)](#)

Subset scales: [Mixolydian Pentatonic \(drop II\)](#), [Minor Pentatonic \(III\)](#), [Major Pentatonic b7 #9 \(IV\)](#)

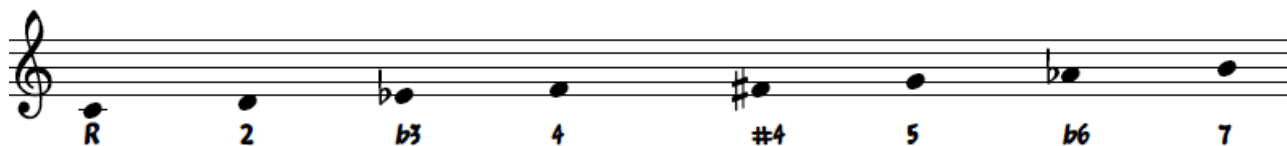
Superset scales: [Blues Mixed \(add b5\)](#), [Mela Ragavardhani \(b6\)](#), [Rock 'n Roll \(6\)](#), [Chromatic Dorian Inverse \(7\)](#)

Chords: C7/b9



Miscellaneous scales

Algerian Octatonic



Modes: [Maqam Shadd'araban](#) (II), [Maqam Hijaz](#) (VI)

Intervals: 2 1 2 1 1 1 3 1

Similar scales: [Bebop Half-diminished](#) (lower degree II)

Subset scales: [Gypsy Minor](#) (drop IV), [Harmonic Minor](#) (V), [Harmonic Minor b5](#) (VI)

Chords: Cm7, Cm7/b13



Algerian



Intervals: 2 1 3 1 1 3 1 2 1 2

Chords: Cmin/maj7

The 11-note Algerian scale is peculiar in that it subdivides an 11th interval, instead of an octave. As its name suggests, this scale is often used in Algerian, Berber, and North African music. The presence of two 3-semitones intervals creates a sound that is often associated with Middle Eastern music. This scale was used by Jacques Ibert in his *Escales* composition.



Symmetrical Nonatonic

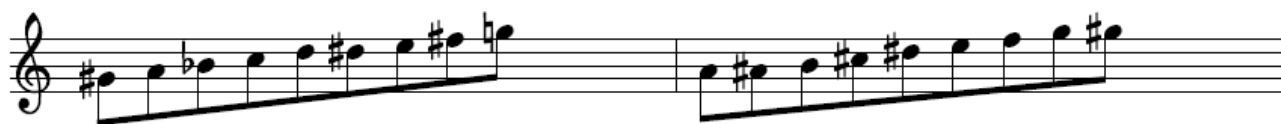
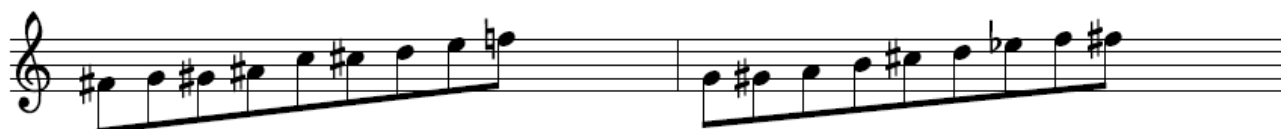
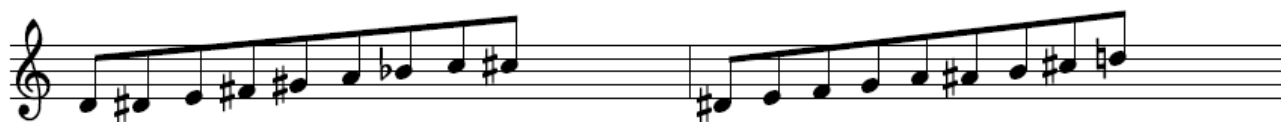


Intervals: 1 1 2 2 1 1 2 1 1

Subset scales: [Messiaen 6th Mode Inverse](#) (drop IX)

Superset scales: [Symmetrical Decatonic](#) (add 4)

Chords: Cmaj7, Cmaj7/#5, C7, C7/#5, C7/b9



Appendix

A. Scale Index

Major and Minor Scales

Scale	Intervals	Notes	Mode	Page
Major	2 2 1 2 2 2 1	C D E F G A B		10
Dorian	2 1 2 2 2 1 2	C D E ^b F G A B ^b	B ^b Major (II)	11
Phrygian	1 2 2 2 1 2 2	C D ^b E ^b F G A ^b B ^b	A ^b Major (III)	12
Lydian	2 2 2 1 2 2 1	C D E F [#] G A B	G Major (IV)	13
Mixolydian	2 2 1 2 2 1 2	C D E F G A B ^b	F Major (V)	14
Aeolian	2 1 2 2 1 2 2	C D E ^b F G A ^b B ^b	E ^b Major (VI)	15
Locrian	1 2 2 1 2 2 2	C D ^b E ^b F G ^b A ^b B ^b	D ^b Major (VII)	16
Melodic Minor	2 1 2 2 2 2 1	C D E ^b F G A B		17
Dorian ¹ 2	1 2 2 2 2 1 2	C D ^b E ^b F G A B ^b	B ^b Melodic Minor (II)	18
Lydian Augmented	2 2 2 2 1 2 1	C D E F [#] G [#] A B	A Melodic Minor (III)	19
Lydian Dominant	2 2 2 1 2 1 2	C D E F [#] G A B ^b	G Melodic Minor (IV)	20
Melodic Major	2 2 1 2 1 2 2	C D E F G A ^b B ^b	F Melodic Minor (V)	21
Half Diminished	2 1 2 1 2 2 2	C D E ^b F G ^b A ^b B ^b	E ^b Melodic Minor (VI)	22
Altered Dominant	1 2 1 2 2 2 2	C E ^b E ^b E F [#] G [#] B ^b	D ^b Melodic Minor (VII)	23
Harmonic Minor	2 1 2 2 1 3 1	C D E ^b F G A ^b B		24
Locrian ⁶	1 2 2 1 3 1 2	C D ^b E ^b F G ^b A B ^b	B ^b Harmonic Minor (II)	25
Ionian Augmented	2 2 1 3 1 2 1	C D E F G [#] A B	A Harmonic Minor (III)	26
Romanian Minor	2 1 3 1 2 1 2	C D E ^b F [#] G A B	G Harmonic Minor (IV)	27
Phrygian Dominant	1 3 1 2 1 2 2	C D ^b E F G A ^b B ^b	F Harmonic Minor (V)	28
Lydian ²	3 1 2 1 2 2 1	C D [#] E F [#] G A B	E Harmonic Minor (VI)	29
Ultralocrian	1 2 1 2 2 1 3	C D ^b E ^b E F [#] G [#] A	D ^b Harmonic Minor (VII)	30

Symmetrical Scales

Scale	Intervals	Notes	Mode	Page
Whole-Tone	2 2 2 2 2 2	C D E F [#] G [#] B ^b		31
Augmented	3 1 3 1 3 1	C D [#] E G A ^b B		32
Augmented Inverted	1 3 1 3 1 3	C D ^b E F G [#] A	B Augmented (II)	33
Diminished	2 1 2 1 2 1 2 1	C D E ^b F F [#] G [#] A B		34
Diminished Half-tone	1 2 1 2 1 2 1 2	C C [#] D [#] E F [#] G A B ^b	B ^b Diminished (II)	35
Chromatic	1 1 1 1 1 1 1 1 1 1 1 1	C C [#] D D [#] E F F [#] G G [#] A B ^b B		36
Tritone	1 3 2 1 3 2	C D ^b E F [#] G B ^b		37
Raga Neelangi	2 1 3 2 1 3	C D E ^b F [#] G [#] A	G [#] Tritone (III)	38
Messiaen 2 nd Mode Truncated	1 2 3 1 2 3	C E ^b E ^b F [#] G A		39
Messiaen 3 rd Mode	2 1 1 2 1 1 2 1 1	C D D [#] E F [#] G G [#] B ^b B		40
Messiaen 4 th Mode	1 1 3 1 1 1 3 1	C C [#] D F F [#] G A ^b B		41
Messiaen 4 th Mode Inverse	3 1 1 1 3 1 1 1	C D [#] E F G ^b A B ^b B	B ^b Messiaen 4 th Mode (III)	42
Messiaen 5 th Mode	1 4 1 1 4 1	C D ^b F F [#] G B		43
Messiaen 5 th Mode Inverse	4 1 1 4 1 1	C E F G ^b B ^b B	B Messiaen 5 th Mode (II)	44
Messiaen 6 th Mode	2 2 1 1 2 2 1 1	C D E F F [#] G [#] A [#] B		45
Messiaen 6 th Mode Inverse	1 1 2 2 1 1 2 2	C C [#] D F F [#] G A ^b B ^b	A ^b Messiaen 6 th Mode (III)	46
Messiaen 7 th Mode	1 1 1 2 1 1 1 2 1	C C [#] D E ^b F F [#] G G [#] A B		47
Messiaen 7 th Mode Inverse	2 1 1 1 2 2 1 1 1 1	C D D [#] E F F [#] G [#] A B ^b B	A Messiaen 7 th Mode (IV)	48
Genus Chromaticum	1 2 1 1 2 1 1 2 1	C C [#] D [#] E F G G [#] A B	A Messiaen 3 rd Mode (III)	49

B. Scales by Name

Scale	Origin	Intervals	Notes	Primary Scale	Page
Acoustic		2 2 2 1 2 1 2	C D E F# G A Bb	Lydian Dominant	20
Adonai Malakh		1 1 1 2 2 2 1 2	C C# D Eb F G A Bb		192
Aeolian		2 1 2 2 1 2 2	C D Eb F G Ab Bb		15
Aeolian b1		3 1 2 2 1 2 1	C D# E F# G# A B		157
Aeolian Harmonic		3 1 2 1 2 2 1	C D# E F# G A B	Lydian #2	29
Aeolian Major		2 2 1 2 1 2 2	C D E F G Ab Bb	Melodic Major	21
Aeolian Pentatonic		2 1 4 1 4	C D Eb G Ab	Ake-Bono	99
Ahava Rabba	Jewish	1 2 1 1 1 2 2 2	C C# D# E F Gb Ab Bb	Spanish Octatonic	228
Ajam Shiram		2 2 1 2 2 2 1	C D E F G A B	Major	10
Ake-Bono	Japan	2 1 4 1 4	C D Eb G Ab		99
Algerian	Tunisia	2 1 3 1 1 3 1 2 1 2	C D Eb F# G Ab B C D Eb F		401
Algerian Octatonic	Tunisia	2 1 2 1 1 1 3 1	C D Eb F F# G Ab B		400
Alhijaz	Arabia	1 3 1 2 1 2 2	C Db E F G Ab Bb	Phrygian Dominant	28
Altered Diminished		2 1 2 1 2 2 2	C D Eb F Gb Ab Bb	Half Diminished	22
Altered Lydian		2 2 2 2 1 2 1	C D E F# G# A B	Lydian Augmented	19
Altered (or Altered Dominant)		1 2 1 2 2 2 2	C Eb Eb E F# G# Bb		23
Altered Pentatonic		1 4 2 2 3	C Db F G A		109
Altered Major Pentatonic		2 2 1 3 4	C D E F Ab		110
Ambassel	Ethiopia	1 3 2 1 4	C Db F G Ab	Suspended Pentatonic	79
Ambassel Minor	Ethiopia	1 3 2 1 4	C Db F G Ab	In	97
Ancient Chinese	China	2 2 2 1 2 3	C D E F# G A	Raga Aivarati	282
Anchihoye	Ethiopia	1 4 1 3 3	C Db F Gb A		126
Anhemitonic Hexatonic		2 2 2 2 2 2	C D E F# G# Bb	Whole-Tone	31
Arabic	Arabia	1 3 1 2 1 3 1	C Db E F G Ab B	Double Harmonic	173
Ararai	Ethiopia	2 2 1 2 2 2 1	C D E F G A B	Major	10
Arezzo Major Diatonic Hexachord		2 2 1 2 2 3	C D E F G A	Scottish Hexatonic	224
Ascending Minor		2 1 2 2 2 2 1	C D Eb F G A B	Melodic Minor	17
Augmented		3 1 3 1 3 1	C D# E G Ab B		32
Augmented Inverted		1 3 1 3 1 3	C Db E F G# A		33
Augmented Pentatonic		3 1 3 1 4	C D# E G Ab		113
Augmented Pentatonic 2		4 2 2 3 1	C E F# G# B		114
Avaha or Ahava Rabba	Jewish	1 3 1 2 1 2 2	C Db E F G Ab Bb	Phrygian Dominant	28
Bac	Vietnam	2 3 2 2 3	C D F G A	Ritusen	81
Banshikicho	Japan	2 1 1 3 2 1 2	C D D# E G A Bb	Bebop Minor	71
Bartok		2 2 2 1 2 1 2	C D E F# G A Bb	Lydian Dominant	20
Batti Minor	Ethiopia	3 2 2 3 2	C Eb F G Bb	Minor Pentatonic	82
Batti Minor #4	Ethiopia	3 3 1 3 2	C Eb F# G Bb	Raga Samudhra Priya	371
Batti Minor 4/#7	Ethiopia	3 3 1 4 1	C Eb F# G B	Raga Multani 2	347
Batti Major	Ethiopia	4 1 2 4 1	C E F G B	Ionian Pentatonic	88
Batti Major #4	Ethiopia	4 2 1 4 1	C E F# G B	Hirajoshi	98
Batti Major #5	Ethiopia	4 1 3 3 1	C E F G# B	Romanian Bacovia	124
Bebop Chromatic		1 1 2 1 2 2 1 1 1	C C# D E F G A Bb B		77
Bebop Dorian		2 1 1 1 2 2 1 2	C D D# E F G A Bb		72
Bebop Half-diminished		1 2 2 1 1 1 3 1	C Db Eb F F# G Ab B		75
Bebop Harmonic Minor		2 1 2 2 1 2 1 1	C D Eb F G Ab Bb B		74
Bebop Locrian		1 2 2 1 1 1 2 2	C Db Eb F F# G Ab Bb		76
Bebop Major		2 2 1 2 1 1 2 1	C D E F G G# A B		68
Bebop Major Heptatonic		2 2 1 2 1 1 3	C D E F G G# A		70
Bebop Major Hexatonic		2 2 3 1 1 3	C D E G G# A		69
Bebop Melodic Minor		2 1 2 2 1 1 2 1	C D Eb F G G# A B		73
Bebop Minor		2 1 1 3 2 1 2	C D D# E G A Bb		71
Bebop Mixolydian		2 2 1 2 2 1 1 1	C D E F G A A# B	Bebop	67
Bebop Natural Minor		2 1 2 2 1 2 1 1	C D Eb F G Ab Bb B	Bebop Harmonic Min.	74
Bebop (or Bebop Dominant)		2 2 1 2 2 1 1 1	C D E F G A Bb B		67
Belinese	Bali	1 2 4 1 4	C Db Eb G Ab	Pelog Pentatonic	89

Blues		3 2 1 1 3 2	C E _b F F [#] G B _b		53
Blues Major		2 1 1 3 2 3	C D E _b E G A		54
Blues Dorian Hexatonic		1 2 1 3 2 3	C C [#] D [#] E G A		60
Blues Enneatonic		2 1 1 1 2 2 1 1 1	C D D [#] E F G A B _b B		58
Blues Enneatonic 2		2 1 1 1 1 1 2 1 2	C D D [#] E F F [#] G A B _b		59
Blues Heptatonic		2 1 2 1 3 1 2	C D E _b F G _b A B _b		54
Blues Heptatonic 2		3 2 1 1 2 1 2	C E _b F F [#] G A B _b		56
Blues Leading Tone		3 2 1 1 3 1 1	C E _b F F [#] G A [#] B		64
Blues Minor		3 2 3 2 2	C E _b F A _b B _b	Man Gong	80
Blues Minor Maj7		3 2 1 1 4 1	C E _b F F [#] G B		62
Blues Minor Pentatonic		3 2 2 3 2	C E _b F G B _b	Minor Pentatonic	82
Blues Mixed		3 1 1 1 1 3 2	C D [#] E F F [#] G B _b		64
Blues Modified		2 1 2 1 1 3 2	C D E _b F F [#] G B _b		63
Blues Octatonic		2 1 2 1 1 2 1 2	C D E _b F F [#] G A B _b		57
Blues (or Blues Hexatonic)		3 2 1 1 3 2	C E _b F F [#] G B _b		53
Blues Phrygian		1 2 2 1 1 3 2	C D _b E _b F F [#] G B _b		61
Buzurg		1 3 1 1 1 2 2 1	C D _b E F F [#] G A B	Raga Bhatiyar	285
Byzantine (or Byzantine Liturgical Chromatic)		1 3 1 2 1 3 1	C D _b E F G A _b B	Double Harmonic	173
Center-Cluster PentaMirror		3 1 1 3 4	C D [#] E F A _b		113
Chad Gadyo	Jewish	2 1 2 2 5	C D E _b F G	Nando-Kyemyonjo	236
Chaio		2 3 3 2 2	C D F G [#] B _b		93
Chin		3 3 2 2 2	C E _b G _b A _b B _b		94
Chinese	China	4 2 1 4 1	C E F [#] G B	Hirajoshi	98
Chinese Eight-tone	China	2 2 1 2 2 1 1 1	C D E F G A B _b B	Bebop	67
Ching	China	4 2 1 4 1	C E F [#] G B	Hirajoshi	98
Chromatic		1 1 1 1 1 1 1 1 1 1 1 1	C C [#] D D [#] E F F [#] G G [#] A B _b B		36
Chromatic Diatonic Dorian		1 1 1 2 2 1 1 1 2	C C [#] D E _b F G G [#] A B _b		176
Chromatic Dorian		1 1 3 2 1 1 3	C C [#] D F G G [#] A		174
Chromatic Dorian Inverse		3 1 1 2 3 1 1	C D [#] E F G B _b B		175
Chromatic Hypodorian		2 1 1 3 1 1 3	C D D [#] E G G [#] A		184
Chromatic Hypolydian		1 3 2 1 1 3 1	C D _b E F [#] G A _b B		186
Chromatic Hypolydian Inverse		1 3 1 1 2 3 1	C D _b E F G _b A _b B	Persian	242
Chromatic Hypophrygian Inverse		1 1 3 1 1 2 3	C C [#] D F F [#] G A		187
Chromatic Lydian		1 3 1 1 3 2 1	C D _b E F G _b A B		179
Chromatic Lydian Inverse		1 2 3 1 1 3 1	C D _b E _b F [#] G A _b B		180
Chromatic Mixolydian		1 1 3 1 1 3 2	C C [#] D F F [#] G B _b		181
Chromatic Mixolydian 2		1 1 2 2 1 3 2	C C [#] D E F [#] G B _b		182
Chromatic Mixolydian Inverse		2 3 1 1 3 1 1	C D F F [#] G B _b B		183
Chromatic Permutated Diatonic Dorian		1 1 2 1 2 1 1 2 1	C C [#] D E F G G [#] A B		188
Chromatic Phrygian		3 1 1 3 2 1 1	C D [#] E F G [#] B _b B		177
Chromatic Phrygian Inverse		1 1 2 3 1 1 3	C C [#] D E G G [#] A		178
Cushak	Armenia	2 1 2 2 1 2 2	C D E _b F G A _b B _b	Aeolian	15
Damian Emmanuel		2 1 3 1 1 2 2	C D E _b F [#] G A _b B _b	Gypsy	197
Dasrgah-e Mahur		2 2 1 2 2 2 1	C D E F G A B	Major	10
Dastgah-e Rast Panjgah		2 2 1 2 2 2 1	C D E F G A B	Major	10
Diminished		2 1 2 1 2 1 2 1	C D E _b F F [#] G [#] A B		34
Diminished Half-tone		1 2 1 2 1 2 1 2	C C [#] D [#] E F [#] G A B _b		35
Diminished Pentatonic		3 3 2 3 1	C E _b F [#] G [#] B		106
Dominant Pentatonic		2 2 3 3 2	C D E G B _b		92
Dorian		2 1 2 2 2 1 2	C D E _b F G A B _b		11
Dorian #4		2 1 3 1 2 1 2	C D E _b F [#] G A B	Romanian Minor	27
Dorian Aeolian		2 1 2 2 1 1 1 2	C D E _b F G G [#] A B _b		135
Dorian ♭2		1 2 2 2 2 1 2	C D _b E _b F G A B _b		18
Dorian ♭2 ♭4	Slonimsky	1 2 1 3 2 1 2	C D _b E _b E G A B _b		136
Dorian ♭5		2 1 2 1 3 1 2	C D E _b F G _b A B _b	Blues Heptatonic	54
Dorian ♭9		1 2 2 1 3 1 2	C D _b E _b F G _b A B _b	Locrian #6	25
Dorian ♭9 #11		1 2 3 1 2 1 2	C D _b E _b F [#] G A B _b		137
Dorian Pentatonic		2 1 4 2 3	C D E _b G A		83

C. Scales by Interval

5-Note Scales

Scale	Intervals	Notes	Mode	Page
Raga Nabhomani	1 1 4 1 5	C C# D F# G		348
Raga Putrika	1 1 6 1 3	C C# D G# A	C# Raga Deshgaur (V)	360
Raga Kumarapriya	1 1 6 3 1	C C# D G# B		326
Raga Chitthakarshini	1 2 2 3 4	C D _b E _b F A _b	A _b Raga Nagaswaravali (II)	117
Raga Chaya Todi	1 2 3 2 4	C D _b E _b G _b A _b	A _b Mixolydian Pentatonic (II)	294
Major Pentatonic $\text{1}\flat 3$	1 2 3 3 3	C D _b E _b F# A		103
Pelog Pentatonic	1 2 4 1 4	C D _b E _b G A _b	A _b Ionian Pentatonic (II)	89
Raga Rukmangi	1 2 4 3 2	C D _b E _b G B _b	B _b Raga Abhogi (II)	369
Greek Arkaik	1 3 1 1 6	C D _b E F G _b		125
Syrian Pentatonic	1 3 1 3 4	C D _b E F A _b		125
Raga Megharamji	1 3 1 6 1	C D _b E F B		343
Major Pentatonic $\text{1}\flat 5$	1 3 2 3 3	C D _b E G _b A		102
Major Pentatonic $\text{1}\flat 2$	1 3 3 2 3	C E _b E G A		101
Raga Manaranjani	1 3 3 3 2	C D _b E G B _b		338
Anchihoye	1 4 1 3 3	C D _b F G _b A		126
Iwato	1 4 1 4 2	C D _b F G _b B _b	F In (IV)	100
In	1 4 2 1 4	C D _b F G A _b		97
Altered Pentatonic	1 4 2 2 3	C D _b F G A		109
Kokin-Choshi	1 4 2 3 2	C D _b F G B _b	B _b Dorian Pentatonic (II)	84
Raga Kshanika	1 4 3 3 1	C D _b F A _b B		325
Raga Saugandhini	1 5 1 1 4	C D _b F# G A _b	F# Raga Nabhomani (IV)	376
Raga Deshgaur	1 6 1 3 1	C D _b G A _b B		296
Nando-Kyemyonjo	2 1 2 2 5	C D E _b F G		236
Raga Audav Tukhari	2 1 2 3 4	C D E _b F A _b		284
Raga Abhogi	2 1 2 4 3	C D E _b F A		281
Ake-Bono	2 1 4 1 4	C D E _b G A _b	G In (III)	99
Dorian Pentatonic	2 1 4 2 3	C D E _b G A		83
Pygmy	2 1 4 3 2	C D E _b G B _b		121
Raga Hamsadhvani	2 1 4 4 1	C D E _b G B		310
Raga Budhamanohari	2 2 1 2 5	C D E F G		289
Altered Major Pentatonic	2 2 1 3 4	C D E F A _b		110
Kung	2 2 2 3 3	C D E G _b A	D Dominant Pentatonic (V)	96
Raga Kumurdaki	2 2 2 5 1	C D E F# B		327
Major Pentatonic $\text{1}\flat 6$	2 2 3 1 4	C D E G A _b	G Altered Pentatonic (III)	104
Major Pentatonic	2 2 3 2 3	C D E G A		78
Dominant Pentatonic	2 2 3 3 2	C D E G B _b		92
Raga Hamsadhvani 2	2 2 3 4 1	C D E G B	G Raga Nagaswaravali (III)	118
Raga Neroshta	2 2 5 2 1	C D E A B	A Nando-Kyemuonjo (III)	353
Han-Kumoi	2 3 2 1 4	C D F G A _b	F Dorian Pentatonic (IV)	86
Ritusen	2 3 2 2 3	C D F G A	F Major Pentatonic (IV)	81
Suspended Pentatonic	2 3 2 3 2	C D G G B _b	B _b Major Pentatonic (II)	79
Tcherepnin Major Pentatonic	2 3 2 4 1	C D F G B	G Mixolydian Pentatonic (III)	108
Chaio	2 3 3 2 2	C D F G# B _b	B _b Dominant Pentatonic (II)	93
Raga Priyadarshini	2 3 3 3 1	C D F G# B	B Major Pentatonic $\text{1}\flat 3$ (II)	358
Pyeong Jo	2 3 4 1 2	C D F A B _b	F Raga Nagaswaravali (IV)	119
Raga Rasranjani	2 3 4 2 1	C D F A B	A Raga Audav Tukhari (III)	366
Raga Shri Kalyan	2 4 1 2 3	C D F# G A	D Mixolydian Pentatonic (V)	379
Raga Hamsanada	2 4 1 4 1	C D F# G B	G Ionian Pentatonic (III)	90
Raga Shubravarni	2 4 3 1 2	C D F# A B _b		380
Raga Matha Kokila	2 5 2 1 2	C D G A B _b	G Nando-Kyemuonjo (IV)	342
Center-Cluster PentaMirror	3 1 1 3 4	C D# E F A _b		113
Locrian Pentatonic	3 1 2 4 2	C D# E G _b B _b		110
Augmented Pentatonic	3 1 3 1 4	C D# E G A _b		113

E. "Messiango" by Javier Giroto

Soprano Sax

MESSIANGO

Tango with Messiaen Modes Scales

JAVIER GIROTO

Ab Messiaen 4° Mode Inverse

4

8

C Messiaen 4° Mode

11

Db Messiaen 5° Mode Inverse

15

Db Messiaen 5° Mode Inverse

18

22

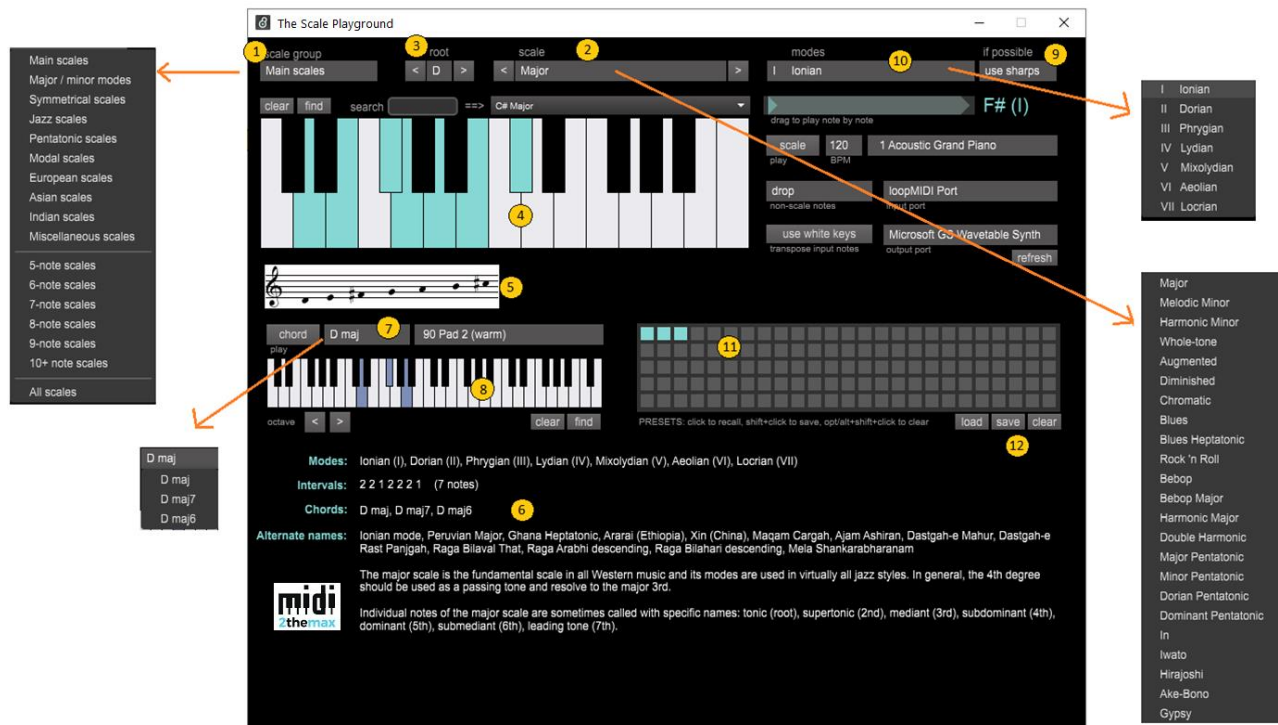
1.

2.

25

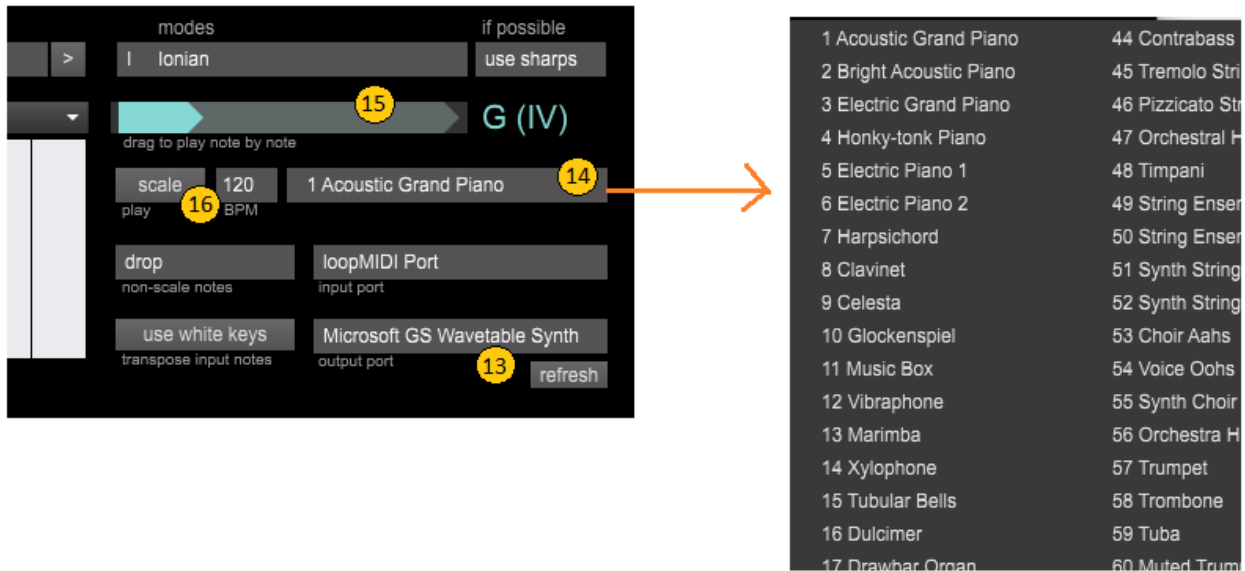
F. The Scale Playground

The Scale Playground is a desktop software - available for both Mac and Windows - that allows you to view, search, hear, play and practice 400 scales from all over the world and for all music genres. It consists of one single window and it takes only a few minutes to get familiar with all its features.



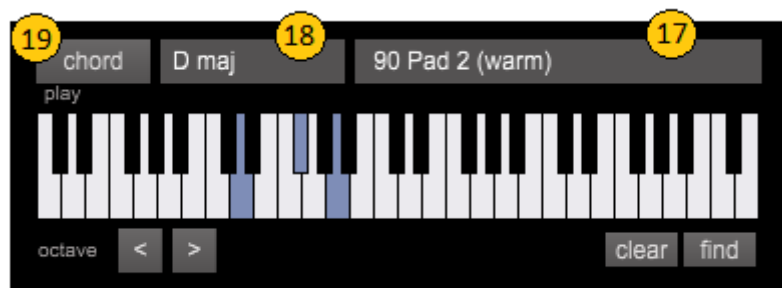
- (1) select a scale group – scales are organized by their type, geographical origin, or number of notes
- (2) select a scale from the group – or use the < > buttons to browse all scales in current group
- (3) select a scale root – or use the < > button to move through all 12 keys
- (4) the result scale appears in the larger keyboard ...
- (5) ... and on the musical staff
- (6) additional information about the scale appear in the bottom half of the window
- (7) you can now select one of the chords that go well with the scale ...
- (8) ... and see the chord notes in the smaller keyboard
- (9) use this menu to display scales *preferably* using flats instead of sharps – if possible
- (10) if the current scale is a mode of another scale, you can read that scale's name at the top of this menu – open the menu to see other modes and select one to make it the current scale
- (11) this panel allows you to save your favorite scales (plus root key and some other settings) in a preset – use shift+click to save, click to recall, and opt+shift+click (on Mac) or alt+shift+click (on Windows) to recall a stored preset
- (12) these buttons allow you to **save** current presets to disk, **load** a saved group or presets, or **clear** the preset panel

The application provides a couple ways to hear the current scale:



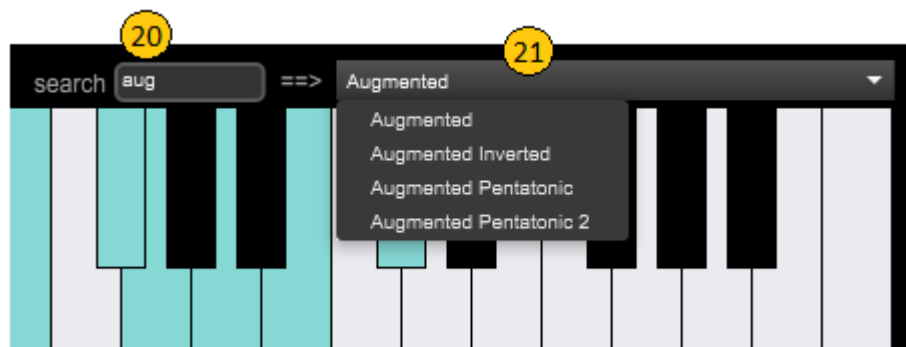
- (13) first, select an output MIDI port connecting to an virtual or physical instrument that recognizes General MIDI 2 instruments ...
- (14) ... and then select one of the 128 timbres that GM2 provides
- (15) next, you can either drag the arrow slider to hear the current scale (within two octave range)
- (16) ... or click on the **scale** button to have the application play the scale for you and adjust the BPM field if you want it slower or faster – this is GREAT for practicing!

You can hear how the scale sounds over a chord using the controls near the smaller keyboard:



- (17) first, select a proper GM2 instrument for chords – these are going to be sustained, thus pads, organs and string sections are best
- (18) select one chord from this menu
- (19) click the **chord** button to start the sound – it will stay active if you select a different chord, a different scale or mode

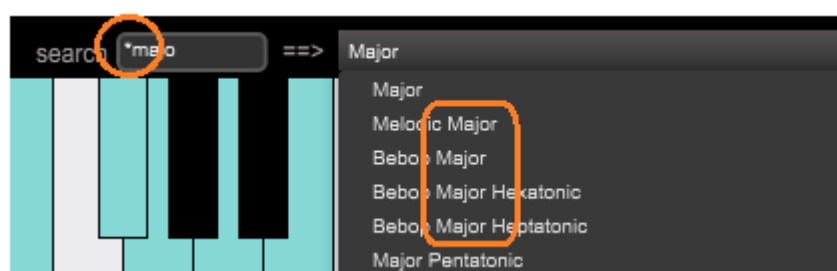
The Scale Playground allows you to find a scale quickly, by either its name or the notes it contains:



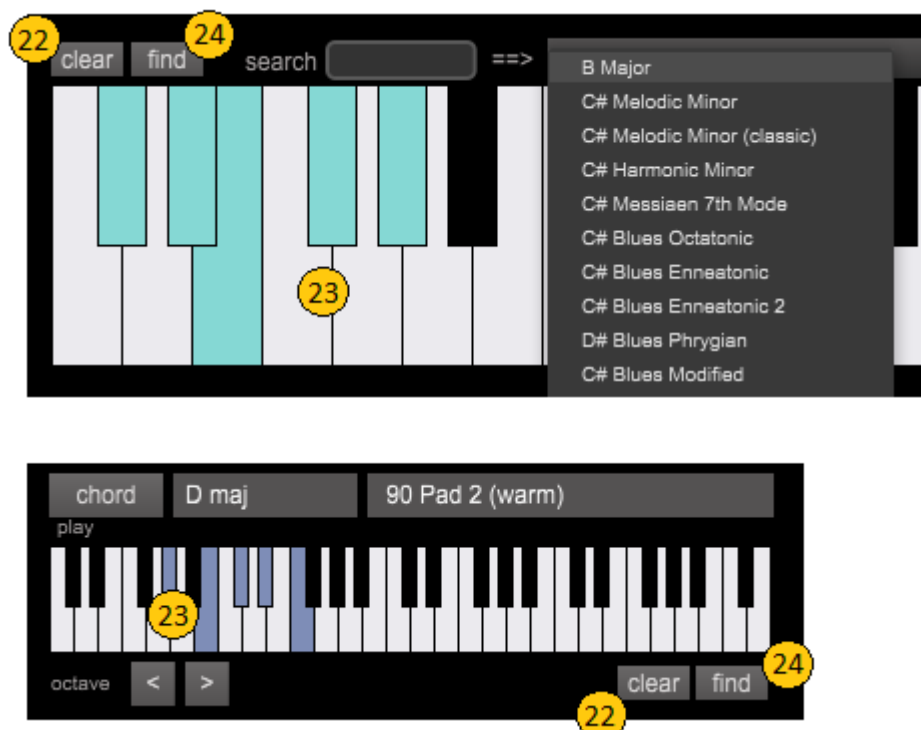
(20) type some characters in the **search** field

(21) ... to fill the menu on its right with all scales whose name ***begins*** with those characters

If the first character is an asterisk, the menu will be filled with scale names that ***contain*** the characters:



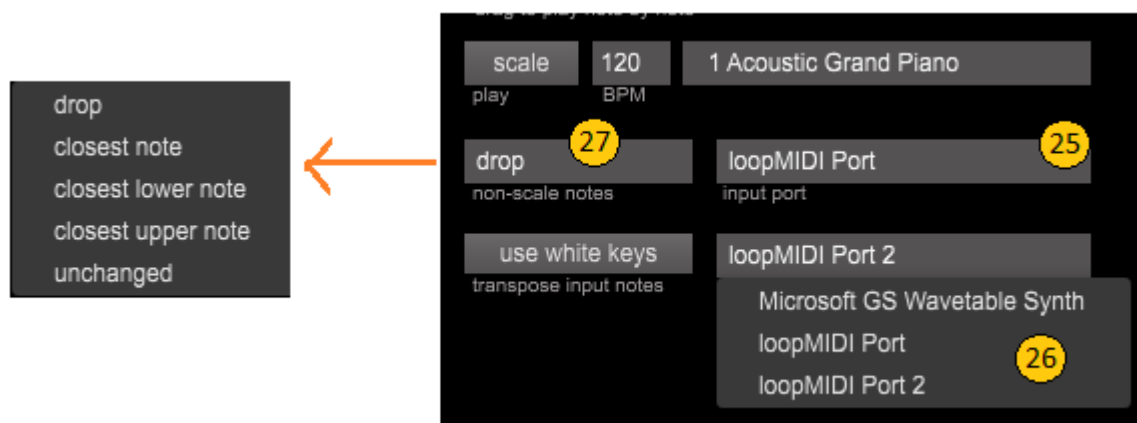
You can search a scale by the notes it contains using either the larger or the smaller keyboard, because both are surrounded by buttons with same name:



(22) use the **clear** button to start with a clean keyboard if necessary - or start with the notes of the current scale or the current chord

- (23) then select or unselect keys on the keyboard ...
- (24) ... and finally click the **find** button to see the list of matching scales – unlike searches by name, in this case the result includes the root note of the scale (which isn't necessarily the lowest note selected on the keyboard)

The Scale Playground can be useful in live performances. If you aren't familiar yet with a scale – perhaps in an unusual key such as F# or D \flat - you can place the application “between” your MIDI keyboard and the virtual or physical instrument you are playing, by using virtual MIDI ports.



- (25) select the MIDI input port to which your MIDI keyboard is connected – **TIP:** if you don't see the port, click the **refresh** button
- (26) select the MIDI output port where MIDI notes will go – it can be a physical port that is connected to a hardware instrument, or a virtual MIDI port that sends to a program such as Ableton Live, Logic, Reason, etc.
- (27) decide how non-scale notes must be processed – the **unchanged** setting basically allows you to disable the scale quantization feature

That's all. You can now experiment, test new scales, and practice them. And just play!

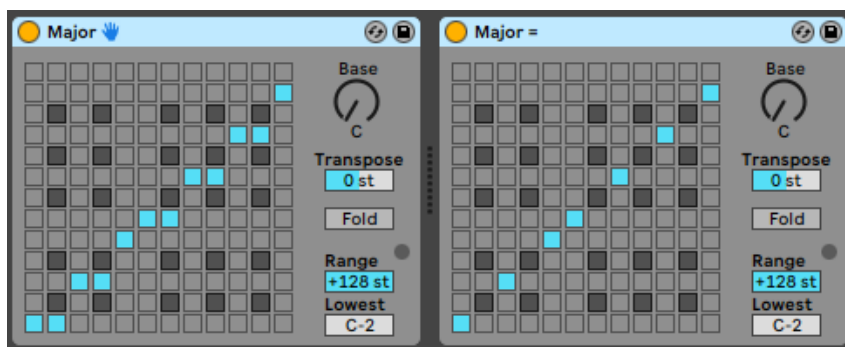
You can buy **The Scale Playground** for a very affordable price at <https://gumroad.com/midi2themax>.

The downloadable item contains both the MacOS and Windows versions.

G. Scale Library for Ableton Live

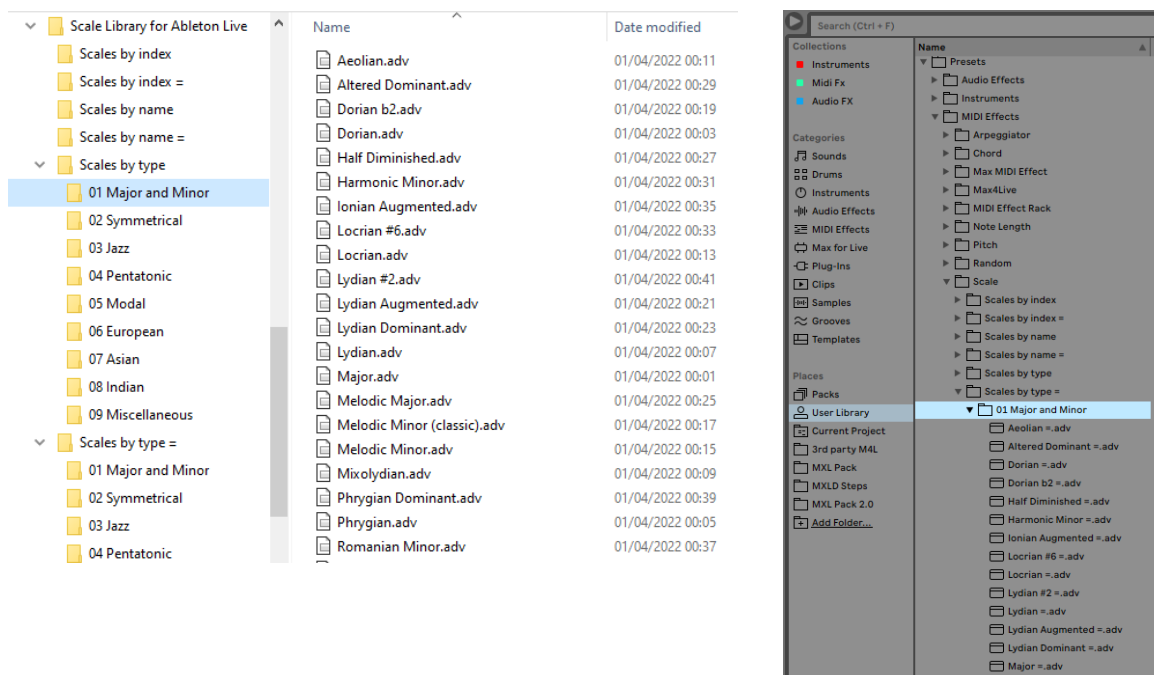
The **Scale Library** is a collection of presets for the Scale device of Ableton Live software, that allows you to be immediately productive with any scale described in this book and ensure that all the notes you play belong to the selected scale.

For each scale two presets are provided: the former “quantizes” incoming notes to the nearest note of the selected scale (see left portion of image below), the latter “blocks” non-scale notes and can be identified by a trailing “=” symbol in its name (see right portion of image):



Each preset file is duplicated three times in the library. This redundancy allows you to quickly find a scale using any of the following criteria:

- **by scale index** – scales are listed in the order used in this book
- **by scale name** – scales are listed alphabetically
- **by scale type** – scales are categorized using the same criteria adopted in this book (major and minor scales, symmetrical scales, pentatonic, etc.)



You can download **The Scale Playground** at <https://gumroad.com/midi2themax>.